

THE

GRAVE YARDS OF LONDON;

BEING

AN EXPOSITION

OF THE

PHYSICAL AND MORAL CONSEQUENCES

INSEPARABLY CONNECTED WITH OUR UNCHRISTIAN AND PESTILEN-TIAL CUSTOM OF

DEPOSITING THE DEAD IN THE MIDST OF THE LIVING;

WITH THE

EXAMINATIONS OF THE AUTHOR,

UPON THIS HIGHLY IMPORTANT SUBJECT,

BEFORE A

Select Committee of the House of Commons.

BY GEORGE ALFRED WALKER, SURGEON, AUTHOR OF "GATHERINGS FROM GRAVE YARDS, ETC."

"SALUS POPULI SUPREMA LEX."

LONDON; LONGMAN AND CO.; AND ALL BOOKSELLERS.

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*** The following pages are principally abridged from an octavo work published in the year 1839, by the same author, under the title of "Gatherings from Grave Yards."

The object in presenting in a condensed and cheap form many facts and arguments then for the first time put forth, is to diffuse more generally, information, instruction, and the author ventures to believe, conviction, upon a subject most vitally important and but little understood. Those who may be disposed to pursue the investigation will find abundance of illustrative matter in the work above alluded to. To the conductors of the Medical, the Literary, the Political and General Press of the Empire, the Author, in the name and on behalf of the religion, the national character, the humanity, the morality and the PUBLIC HEALTH of the country, begs to offer his sincere thanks for their powerful cooperation : and he trusts they will second, with equal energy, this further effort for the annihilation of a most disgusting and destructive nuisance.

101, Drury Lane, August, 1841.

CHAPTER I.

HISTORICAL AND GENERAL OBSERVATIONS.

Decently to dispose of the dead, and vigilantly to secure their remains from violation, are among the first duties of society. Our domestic endearments—our social attachments—our national prepossessions, respect and sanctify the resting places of our forefathers. The most barbarous of mankind, would burn with indignation, at beholding the last remains of a beloved relative exposed, mangled or mutilated : and yet, among us, in a moral and Christian country, the abode of the dead is openly violated—its deposits are sacrilegiously disturbed, and ejected—the tender solicitudes of survivors, are cruelly sported with, and the identity of relationship is destroyed,—so eager, indeed, is the haste to dispossess previous occeupants, that time is not even allowed, for the *gradual* dissipation of decaying human putrescence: this is climinated in gaseous profusion, contaminating, as it circulates, the habitations of the living.

Whence this rude invasion of the tomb? How can we reconcile, the previous anxieties of survivors, to secure a respectable interment, with the subsequent unconcern, neglect, or abandonment of the localities of the dead? I shall not presume to solve these questions; I cannot, however, help thinking, that the depredations of the "grave yard" are comparatively disregarded, from a feeling and a desire common to every man,—a feeling of unwillingness to believe, that his own friends have been disturbed, and, a natural desire to avoid the renewal of melancholy reminiscences. "All men think all men mortal but themselves." This self delusion, is carried yet further; for, while every man readily sympathizes with others, at the disturbance of their dead; he believes his own depository secure, and his future repose inviolable.

Every member of society is interested in the statement—that in the Metropolis and in very many towns and villages of the empire, the abodes of the dead are insecure. By far the greater number of grave yards are erowded to excess; many, indeed, have been in this condition for an indefinite period; so that additional interments eould not have taken place without a very questionable disturbance and displacement of previous deposits. The mere allusion to this particular will, I am aware, arouse the sensibilities of our nature; but the proofs are conclusive.

And are these the "consecrated grounds," the "sanctuaries," the "resting places" of our ancestors? Let the inquiry be instituted, by whom are these violations of the grave directed, or sanctioned, or committed, and on what authority? This is an inquiry which essentially interests all classes of the community; and, perhaps more than any other, "comes home to men's business and bosoms." It would seem that interment of the dead within Churches or Vaults, or in Burying Grounds, surrounded with houses, or in the immediate vicinity of densely populated Cities or Towns, is so familiar from its frequent or daily occurrence—accidents *clearly* traccable to the influence of putrefying effluvia so seldom, comparatively, arise from the practice of inhumation—that the most perfect indifference appears to prevail upon the subject; no danger seems to be dreaded, no fear excited, no apprehension even entertained of the injurious and destructive agencies which are constantly in operation, and armed with invisible and irresistible powers; and yet it is not difficult to show that some of the most afflictive visitations of Providence have originated in the contamination of the atmosphere, from putrefying animal substances—and that to the neighbourhood of the "Grave Yard" may be attributed the violence, if not the origin, of some of the most destructive diseases which have depopulated the human race.

That London with its thousands of busy minds and observant eyes should bear upon its breast those plague spots, the BURIAL GROUNDS, must appear to every reflecting mind, an anomaly not easily explained. Yet thus it is—whilst men are daily developing the simple and beautiful laws of the universe, and basing upon them systems as comprehensive as the laws they illustrate—the most perfect indifference is manifested as to the wilful infringement of those laws, and the most contemptuous disregard of the direful consequences which result from such violations.

This state of things cannot wholly be ascribed to ignorance; for in this modern Babylon there are those who by their scientific attainments, their leisure, and their acknowledged ability, must be supposed attentive to the action of general agencies, and fully eognizant of the cvils inseparably connected with the present mode of burying the dead:—there are—there must be, men, who, standing aloof from the passions, the employments, and the anxieties that actuate large communities, have leisure for reflection, and time for execution;—yet they have not attempted to rouse the public mind to the consideration of a most important, though latent cause of disease and death. So important, indeed, do I consider this subject, that I have spared neither time, labour, nor expense in the investigation; and, after mature reflection, I felt I had a stern and incxorable duty to perform; otherwise, I should have shrunk from the task.

With the exception of a few of the most barbarous tribes, all nations, through all ages, have venerated the burial places of the dead. *Inhumation* has been the prevailing custom, and for the most part the vicinity of towns and cities has been most serupulously avoided. Even among the Egyptians, where the custom of embalming was more generally adopted than in any other country, inhumation was praetised among the common people. It is true that the custom of burning the dead succeeded to embalming, and that with the Greeks and Romans it was by no means uncommon: this eustom, however took its rise from a religious regard to the resting places of the dead. "It was observed that long wars, frequent transmigrations, the destruction and rc-building of eities, might, with the revolution of time, overturn the whole surface of a country; and that longs confided for several centuries, to the bosom of the earth, would then unavoidably be caposed upon the surface. The FEAR OF

such A PROFANATION determined the practise of burning the dead ; their repose, from that moment, was considered as secure."

The Jews were very eareful to remove the dead from their dwellings. They dreaded all communication with them, so much so that travellers were even forbidden to walk upon places where the dead were buried. Caverns and fields were destined for places of burial. The priests, it is true, were buried on their own estates, and sometimes in the tombs of kings; but every city always had its public eemetery outside the walls.

Inhumation was always more general in *Greece* than elsewhere, and the very salutary custom of conveying the dead to a distance from the cities, was inviolably preserved; indeed the whole religious doctrine and mythology of the Greeks tended powerfully to strengthen and support the laws which directed the bodies of the dead to be removed far from the habitations of the living.

The *Romans* entertained a religious veneration for the dead ; and the places destined for sepulchre, were held particularly sacred. The law of the Twelve Tables expressly forbids the burning or burial of any dead body in the eity.

"Hominem mortuum in urbe ne sepelito neve urito."

Inhumation was established among the early *Christians*, and their dead were earried out of the eity; but after Constantine had embraced the Christian religion, and peace had been established, innovations were admitted in the mode or place of interment. Constantine was allowed the privilege of being buried in the vestibule of a temple he had himself built; and the same honour was alterwards conferred on many of his successors. It was subsequently granted to benefactors, who had provided liberally for the decorations of altars, and for the expenses incurred in performing the august ceremonies of religion, till at length, from veneration, ambition, or superstition, the abuse was carried so far, that interment, in the vicinity of churches, was granted to Pagans and Christians,—to the impious and the holy.

Attempts were unquestionably made by Emperors and Ecclesiastics, to correct this abuse. Theodosius the Great, in 381, published his celebrated code in which he forbade the interment of the dead in the interior of cities, and even ordered that the bodies, the urns, and the monuments which were in the city of Rome, should be carried without the walls. The monks strictly observed the rules, and eonducted themselves on this point, with the most austere severity; those who inhabited grottoes and deserts, were buried in forests, and in the heart of mountains. Walford, Abbot of Palazzolo, in Tuscany, was the first who, in the eighth century, wished to be buried in his own eloister. Sepulchres were soon afterwards introduced into churches, and further encroachments were rapidly made, till at length the prevailing custom was opposed to the established law, and the prerogative which was originally reserved for Emperors, became the portion of the lowest class of citizens, and that which was at first a distinction, became a right, common to every one.

It must be admitted, however, that in Catholie countries, the anthorities of councils and the decrees of Popes, &c. have been directly opposed to interment in churches, and in the vicinity of cities and towns; but the desire of distinction penetrated into the interior of temples, and permission having become easy and general, distinction could only be acquired by the position of the tombs, and the magnificence of their decorations. A decree was issued by the Archbishop of Tolouse, in the reign of Louis XV. of France, against the admission of the dead within consecrated walls, and in places held sacred. He states, that in violation of the holy canons, interments in the metropolitan church had increased exceedingly, and that the air was sensibly contaminated by fetid exhalations from vaults. With a truly apostolic mildness, he reasons upon the dangers and the profanation of the practice, and as an excuse for his interference and to secure the compliance of his diocese, says, "it was necessary that your eyes should be opened to your danger by repeated accidents, sudden deaths, and repeated epidemies. It was necessary that your own wishes, impelled by sad experience, should compel our interference; and that the excess of the evil should call, in a manner, for an excess of precautionary measures."

The French Government has indeed shown itself pre-eminently attentive to the health, and consequently, to the happiness of its constituents. Commissions have been issued-enquiries instituted-laws enaeted-royal dcerccs published, and well arranged plans formed and executed. The remains of those who had long lain mouldering in their tombs have been earefully removed from the interior of cities, and respectfully and securely deposited, and mortuaries have been fixed and eonseerated for those who follow so far distant from "the busy hum of men" as not to molest or endanger the survivors; nor has America been idle, this important subject engaged the authorities of New York in the beginning of the present century. The Board of Health of that eity, in 1806, appointed a Committee, to report on measures necessary to seeure the health of the inhabitants, and a prohibition of interment within the eity was afterwards formally determined upon. To Great Britain belongs the unenviable distinction of being wholly supine in so momentous a matter; and yet from the vast masses of human putrefaction annually deposited in the metropolis alone, restrictive regulations seem to be no where so imperatively required.

It appears from an official rcturn, made to the House of Commons, in the year 1833, that "in the parishes and places within the London bills of mortality, and of Chelsea, Kensington, Saint Mary-le-Bone, Paddington, and St. Paneras, in the county of Middlesex," 32,412 interments took place in the burying places of the Establishment, *exclusive* of those belonging to the Dissenters, Jews, and Catholies. From this return the following numbers are taken, viz:—

All Saints, Poplar, 456; St. Andrews, Holborn, 820; St. Anne, Limehouse, 396; St. Annc, Westminster, 494; Christ Church, Spital Fields, 594; Christ Church, Surrey, 540; St. Clement Danes, 516; St. Dunstan, Stepney, 703; St. George, Hanover Square, 1510; Saint George, Middlesex, 708; St. George, Southwark, 943; St. Giles in the Fields, 1642; St. James, Clerkenwell, 842; St. James, Westminster, 803; St. Leonard, Shorediteh, 963; Saint Luke, Chelsea, 1033; St. Luke, Old Street, 593; St. Margaret, Westminster, 930; St. Martin in the Fields, 565; St. Mary, Islington, 796; St. Mary, Lambeth, 1427; St. Mary, Newington, 547; St. Mary, Rotherhithe, 454; St. Mary, Witeehapel, 557; St. Mary-le-Bone, 3040; St. Matthew, Bethnal Green, 1054; St. Paneras, 1769; St. Paul, Covent Garden, 406; St. Saviour, Southwark, 590. I am perfectly convinced that from many private burial grounds, in low and crowded neighbourhoods, where the lowness of the fees has occasioned an immense influx of funerals, no returns whatever have been made, or returns purposely inaccurate, have been furnished. The returns from some places I could name would be instructive.

From official documents it also appears that the number of bodies buried in the metropolis

From	1766 1793	••	1765, inclusive, we 1792 1813 1837	. 605,832 . 402,595
				2,105,112

I have not been able to procure any satisfactory accounts of the numbers interred in burying grounds unconnected with the Established Church. By some parties *information was refused*, by others the records of the place were stated to have been *lost or neglected*, and in some cases the *parties most interested in surractives*, *had alone the power to communicate*. The number must, however, be enormously vast, seeing that there are, in various parts of the metropolis, about 450 places of worship, of which nearly 200 belong to the Establishment; there are 47 for Baptists, 6 for the Society of Friends, upwards of 100 for Independents, 32 for Wesleyan Methodists, 4 for Swedenborgians, 6 for Unitarians, 4 for Welsh Calvinists, and numerous others, for different classes of Protestant Dissenters. There are, also, 9 chapels in connection with the Church of Scotland, 14 Roman Catholic chapels, 7 synagogues, and 18 foreign Protestant churches and chapels.

CHAP. II.

DESCRIPTION OF SOME OF THE METROPOLITAN BURYING GROUNDS.

From the following descriptions, the reader will be able to form a faint estimate of the dangers by which he is surrounded :----

CLEMENT'S LANE.—This is a narrow thoroughfare on the eastern side of Clare Market; it extends from Clare Market to the Strand, and is surrounded by places, from which are continually given off emanations from animal putrescence. The back windows of the houses on the east side of the lane look into a burying ground called the "Green Ground," in Portugal Street, presently to be described; on the west side the windows permit the odour of another burying place—a private one, called Enon Chapel—to perflate the houses; at the bottom—the south end—of this Lane, is another burying place, belonging to the Alms Houses, within a few feet of the Strand, and in the centre of the Strand are the burying ground and vaults of St. Clement Danes; in addition to which, there are several slaughter houses in the immediate neighbourhood: so that in a distance of about two hundred yards, in a direct line there are four burying grounds; and the living here breathe on all sides an atmosphere impregnated with the odour of the dead. The inhabitants of this narrow thoroughfare are very unhealthy; nearly every room in every house is oeeupied by a separate family. Typhus fever in its aggravated form has attacked by farthe majority of the residents, and death has made among them the most destructive ravages.

BURYING GROUND, PORTUGAL STREET.—This ground belongs to the parish of St. Clement Danes, and has been in use as a burying place beyond the memory of man.

The effluvia from this ground, at certain periods, are so offensive, that persons living in the back of Clement's Lane are compelled to keep their windows closed; the walls even of the ground which adjoins the yards of those houses, are frequently seen recking with fluid, which diffuses a most offensive smell. Who can wonder, then, that fever is here so prevalent and so triumphant?

In the beginning of the year 1839, I was called upon to attend a poor man, who lived at 33, Clement's Lane; his health was broken, his spirits depressed, and he was fast merging into that low form of fever of which this locality has furnished so many examples. I found him in the back room of an extremely dirty house, his wife and family with him. On looking through the window of his room, I noticed a grave open within a few feet of the house; the siek man replied to my observations, "Ah, that grave is just made for a poor fellow who died in this house, in the room above me; he died of typhus fever, from which his wife has just recovered,—they have kept him twelve days, and now they are going to put him under my nose, by way of warning to me."

About twenty years since, it was the custom in this ground to bury the poor in a vault underneath the pauper's promenade, which is now flagged over. Trap doors covered the entrance to the vault, and a large chimney or shaft, rising from about the centre of the vault, carried off the products of decomposition from this place. The smell, I am informed by a respectable man, was disgustingly offensive, and was frequently intolerable during hot weather. The bodies were buried in slight deal three-quarter stuff coffins; these were soon destroyed: they were packed, as is the custom, one upon the other; the superincumbent weight, aided by the putrefactive process, had deranged several of the bodies; in replacing one of the coffins, three guincas fell from it; it was supposed that the money had been clutched in the hand previous to death; a more rational supposition is, that the nurse had hidden the money in the coffin, but that the opportunity had not offered of removing it.

ENON CHAPEL .- This building is situated about midway on the western side of Clement's Lane. It is surrounded on all sides by houses, erowded by inhabitants, principally of the poorer class. The upper part of this building was opened for the purposes of public worship about 1823. It is separated from the lower part by a boarded floor: this is used as a burying place, and is crowded at one end, even to the top of the eeiling, with dead. It is entered from the inside of the ehapel by a trap door ; the rafters supporting the floor are not even eovered with the usual defence-lath and plaster. Vast numbers of bodies have been placed here in pits, dug for the purpose, the uppermost of which were covered only by a few inches of earth; a sewer runs angularly across this "burying place." From the most authentic information, I have reason to believe, that since the establishment of this place, from ten to twelve thousand bodies have been deposited here, not one of which has been placed in lead. A few years ago, the Commissioners of Sewers, for some eause, interfered,-and

another arch was thrown over the old one; in this operation many bodies were disturbed and mutilated. Soon after interments were made, a peculiarly long narrow black fly was observed to crawl out of many of the eoffins; this insect, a product of the putrefaction of the bodics, was observed on the following season to be succeeded by another, which had the appearance of a common bug with wings. The children attending the SUNDAY SCHOOL, held in this chapel, in which these insects were to be seen crawling and flying, in vast numbers, during the summer months, called them "body bugs,"-the stench was frequently intolerable; one of my informants states, that he had a peculiar taste in his mouth during the time of worship, and that his handkcrchief was so offensive, that immediately upon his return home, his wife used to place it in water. The parish authorities interfered upon the subject of poor rates, proposing to impose a mere nominal rate, if the place were closed; this was done for about twelve months. In defiance of opinion, however, it was again employed for the purposes of interment, and has been so used up to the present time. I am acquainted with many who have been seriously affected by exhalations from this eorpse hole, and who have left the place in consequence.

Some months since, hand bills were eireulated in the neighbourhood, "requesting parents and others to send the children of the district to the Sunday School," held immediately over the masses of putrefaction in the vault beneath.

Residents about this spot, in warm and damp weather, have been much annoyed with a peculiarly disgusting smell; and oceasionally, when the fire was lighted in a house abutting upon this building, an intolerable stench arose, which it was believed did not proceed from a drain. Vast numbers of rats infest the houses; and meat exposed to this atmosphere, after a few hours, becomes putrid.

This place is familiarly known among undertakers by the appellation of the "Dust Hole," and is a specimen of one of the evils which sprang up during the operation of certain laws that were hostile to the cultivation of anatomical science, which have happily now been repealed. The professed scenrity of the dead was made the pretext; individual advantage was the real object for depositories of this deseription. The health and comforts of the living were entirely disregarded, and the annoyance and dangers, resulting from the proximity and effluvia of decaying animal substances were submitted to, and hazarded by survivors, rather than subject themselves to the tormenting anxieties which arise from the apprehensions of a brutal exhumation.

I have several times visited this Golgotha. I was struck with the total disregard of decency exhibited, numbers of coffins were piled in confusion; large quantities of bones were mixed with the earth, and lying upon the floor of this cellar (for vault it ought not to be called); lids of *coffins* might be trodden upon at almost every step.

My reflections upon leaving the masses of corruption here exposed, were painful in the extreme; I want language to express the intense feelings of pity, contempt, and abhorrence I experienced. Can it be, thought I, that in the nineteenth century, in the very centre of the most magnificent city of the universe, such sad, very sad mementos of ignorance, cupidity, and degraded morality, still exist? Possibly I am now treading over the mouldering remains of many, once the cherished idols of the heart's best and purest affections,—here, thought I, may repose one who has had his cares, his anxieties—who, perchance, may have well fulfilled life's duties, and who has tasted its pleasures and its sorrows,—here he sleeps as I must sleep; yet I could not but desire that I might have a better resting place—a *Christian* burial.

ST. CLEMENT'S CHURCH, Strand.-There is a vault under this church called the "Rector's Vault," the descent into which is in the aisle of the church near the communion table, and when opened the products of the decomposition of animal matter are so powerful, that lighted eandles, passed through the opening into the vault, are instantly extinguished. The men at different times employed, have not dared to descend into the vault until two or three days had elapsed after it had been opened, during which period the windows of the church also were opened to admit the perflation of air from the street to occupy the place of the gas emitted;-thus a diluted poison is given in exchange from the dead to the living in one of the most frequented thoroughfares of the metropolis. The other vaults underneath the church are also much cowded with dead. From some eause, at present doubtful, these vaults were discovered to be on fire upwards of fifty years ago; they continued burning for some days, and many bodies were destroyed.

At the eastern side of this church a pump was formerly fixed, it has since been removed. The well was sunk in the year 1807, but the water had become so offensive, both to smell and taste, that it could not be used by the inhabitants, owing, most probably, to the infiltration of the dissolved products of human putrefaction. Graves certainly have been dug very near to this well, and the land springs have risen to within a few feet of the surface.

ST. MARTIN IN THE FIELDS.—The old burying ground adjoining the church has been broken up for the purpose of making improvements in the city of Westminster; the dead were disinterred, and their remains removed to vaults, called cataeombs.

DRURY LANE BURYING GROUND belongs to the parish of St. Martin's in the Fields. Many thousands of bodies have been here deposited. The substratum was, some years since, so saturated with dead, that the place "was shut up" for a period. The ground was subsequently raised to its present height—*level with the first floor windows surrounding the place*, and in this superstratum vast numbers of bodies have, up to this period, been deposited. A short time since a pit was dug (a very common practice here) in one corner of the ground, and in it many bodies were deposited at different periods, the top of the pit being covered only with boards. This ground is a most intolerable and highly dangerous nuisance to the entire neighbourhood. Rather more than two years ago, in making three areas to the centre houses on the western side of this burying ground, many bodies were disturbed and mutilated. The inhabitants of the houses are frequently annoyed by the most disgusting and repulsive sights.

RUSSELL COURT, DRURY LANE. — This BURYING GROUND belongs to the parish of St. Mary-le-Strand. In its original state it was below the level of the adjoining ground; now, the surface is on a line with the first floor windows, of the houses entirely surrounding this place. It has long been in a very disgusting condition, but within the last few months the surface has been "cleaned up," and the whole may now be ealled "the whited sepulchre." About twenty years ago a very respectable tradesman in the neighbourhood, was employed to make a "cold air drain" at the west end of this ground. For this purpose it was necessary to cut through the wall of an adjoining house, and on taking up the ground floor large quantities of human bones were found scattered about. It was supposed they had been dragged thither by rats, vast numbers of which annoy the inhabitants in the proximity of this ground.

ST. PAUL'S, COVENT GARDEN.—The burying ground adjoining the church, with difficulty admits an increase. On a recent oceasion, the grave digger had to make several trials before he could find room for a new tonant, and he assured me that on several occasions, he had been driven from the attempt of digging a grave, and compelled to throw back the carth, owing to the dangerous effluvia he experienced from the soil. The vault underneath the church is also erowded.

ST. GILES'S BURYING GROUND.—St. Giles's parish has the melancholy notoriety of originating the plague in 1665. It was the fashion in those days to aseribe that visitation to *imported contagion*? I will not pause to enquire whether in the disgusting condition of many portions of this and other districts sufficient eauses may not be operating to produce an indigenous effect, which might again be ascribed to a foreign origin.

Pennant, in his account of London, expresses himself strongly on the condition of this ehurch yard :—" I have," says he, " in the church yard of St. Giles's seen with horror, a great square pit, with many rows of coffins piled one upon the other, all exposed to sight aud smell; some of the piles were incomplete, expecting the mortality of the night. I turned away disgusted at the view, and seandalized at the want of poliee, which so little regards the health of the living, as to permit so many putrid corpses, tacked between some slight boards, *dispersing their dangerous effluvia over the capital*, to remain unburied. Notwithstanding a eompliment paid to me in one of the public papers, of my having oceasioned the abolition of the horrible praetice, it still remains uncorrected in this great parish. The reform ought to have begun in the place just stigmatised."

That the present condition of this burying place is not much improved, will be seen by the following extract, taken from a London journal of September, 1838:--

"What a horrid place is Saint Giles's church yard! It is full of coffins, up to the surface. Coffins are broken up before they are decayed, and bodies are removed to the "bone-house" before they are sufficiently decayed to make their removal decent. The effect upon the atmosphere, in that very densely populated'spot, must be very injurious. I had oceasion to attend the church with several gentlemen, on Tuesday, being required to wait, we went into this Golgotha; Near the east side we saw a finished grave, into which had projected a nearly sound coffin; half of the coffin had been ehopped away to complete the shape of the new grave. A man was standing by with a barrowful of sound wood, and several bright coffin plates. Ι asked him "Why is all this?" and his answer was, "O, it is all Irish." We then crossed to the opposite corner, and there is the "bone house,"which is a large round pit ; into this had been shot, from a wheelbarrow, the but partly-decayed inmates of the smashed coffins. Here, in this place of "Christian burial," you may see human heads, covered with hair; and here, in this "consecrated ground," are human bones with flesh still adhering to them. On the north side, a man was digging a grave; he was quite drunk, so indeed were all the grave diggers we saw. We looked into this grave, but the stench was abominable. We remained, however, long enough to see that a child's coffin, which had stopped the man's progress, had been cut, longitudinally, right in half; and there lay the child, which had been buried in it, wrapped in its shroud, resting upon the part of the coffin which remained. The shroud was but little decayed. I make no comments; every person must see the ill effects if such practices are allowed to continue."

The vaults of this church are crowded with dead; they are better ventilated than many others; so much the worse for the public.

I have been the more particular in the foregoing statements, as the places described are situated in my immediate neighbourhood, and first attracted my especial attention to the fatal consequences that must ultimately arise, if the practice of interment in the midst of the living be not speedily abolished altogether, or at least confined within the narrowest limits. The following brief outline of the state of several other churches and grounds of the metropolis will prove, that the evils apprehended are confined to no particular locality; but that, wherever the enquiry is instituted, similar facts are established, and dangers and results equally injurious and fatal, to the health of the inhabitants, may, with too much reason, be apprehended.

ALDGATE CHURCH YARD.—The state of this burying ground is truly alarming. The fatal occurrence which took place in September, 1838, during the opening of a grave (the particulars of which will be fresh in public recollection), not only excited considerable alarm at the moment, but must convince the most sceptical, of the dangers of inhumation in the church yards of the metropolis. This ground is crowded to excess.

WHITECHAPEL CHURCH.— The VAULTS underneath this church, have been suffered to fall into a very dilapidated state; the smell from them, owing to the exposed and decayed state of some of the coffins is very offensive.

The BURIAL GROUND, adjoining the church, abuts upon one of the greatest thoroughfares in London, and is placed in the centre of a densely populated neighbourhood. Its appearance altogether is extremely disgusting, and I have no doubt whatever, that the putrefactive process which is here very rapidly going on, must in a great measure, be the cause of producing, certainly of increasing, the numerous diseases by which the lower order of the inhabitants of this parish have so frequently been visited. The ground is so densely crowded as to present one entire mass of human bones and putrefaction. These remains are treated with ruthless indifference. They arc exhumed by shovelfuls, and disgustingly exposed to the pensive observations of the passer-by-to the jcers or contempt of the profane or brutal. It appears almost impossible to dig a grave in this ground without coming into contact with some recent interment, and the grave digger's pick is often forced through the lid of a coffin when least expected, from which so dreadful an effluvium is emitted, as to occasion immediate annoyance. Most of the graves are very shallow; some entire coffins, indeed, are to be found within a foot and a half of the surface.

In digging a foundation for a new wall, on the eastern side of the church, the workmen penetrated through a mass of human bones eight or ten feet in thickness. These bones were thrown out, and for some time lay exposed to public view, seattered over the ground in a loathsome humid state. Two or three pits were afterwards dug to the depth of eight or ten feet, as common repositories for these bones, and the pits were filled up to within a few inches of the top, with a slight covering of earth over them. Family graves also were disturbed, and many coffins exposed,—some of them literally cut in two. Coffin wood is plentifully strewed over the ground in a rotten and decomposed state.

ST. MARY'S CATHOLIC CHAPEL, Moor Fields.—The burial ground adjoining this chapel is crowded to excess, and has been closed for several years past. The vaults under the chapel are principally for private persons; none but the more wealthy Catholies are interred in them.

There is a burial ground belonging to this chapel in Poplar, where a great many of the poor Irish are interred. This place too is very full. The ground is very damp, and cannot be dug beyond five or six feet "without coming to water." Many of the bodies lie near the surface, slightly covered over with earth. The neighbourhood is thickly inhabited, much sickness latterly prevailed, both among children and adults.

Another burial ground belonging to this chapel, in Dog Row, Whiteehapel Road, is also excessively full, and requires to be dug with the greatest eare.

SPITAL FIELDS GROUND adjoins the church, and is literally overeharged with dead. The vault underneath the body of the church is also very much crowded.

BETHNAL GREEN.—There are two burial grounds in this parish, ealled the old and new ground. The old ground, like that of Whitechapel, is very full,—from eight to ten funerals have taken place daily, and three or four grave diggers are constantly employed. The depth of the graves is, on an average, little more than four feet,—at a greater depth the water flows in. The new ground is situated in the Bethnal Green Road, adjoining to the new church.

STEPNEY—The burial ground adjoins the church, and is crowded to excess. Footpaths cross through it in every direction. The soil, largely imbued with the products of putrefaction, is also extremely moist; many of the tomb-stones have sunk deeply in the earth. Here the peculiar putrefactive odour may be frequently distinguished, —as indeed it may in many of the burial places I have described.

MULBERRY CHAPEL, Well Street, St. George's in the East.— There are three vaults belonging to this chapel, one underneath the *chapel*, one underneath the *school* connected with it, and one underneath the *alms-houses*. They are all very full of bodies, particularly the two latter. A great many of the coffins are in a very decayed state. The smell from them is very offensive. The neighbourhood is densely inhabited.

ELENORA, SWEDISH PROTESTANT CHURCH, in Princess Square.— The ground was given to Charles the XIIth of Sweden, and the church was built by his sister, Elenora, after whom it is named. The burial ground is full; interment in it is discontinued. The grave digger, an old Swede, narrowly escaped with his life, on two occasions, from the falling in of the ground. There is a vault underneath the church, which is never opened, unless for burial; the entrance is secured by a very heavy stone slab. ST. GEORGE'S CHURCH, Cannon Street, East.—This is the parish church. The burial ground, which adjoins the church, is excessively crowded; many of the tomb-stones have sunk into the ground. There are public and private vaults; the former underneath the steps and entrance, the latter under the body of the church. The public vaults are greatly crowded. and in a loathsome state.

EBENEZER CHAPEL, Ratcliff Highway.—The burying ground is very small, but overcharged with dead. It is considered dangerous to open agrave. The neighbourhood is very populous. This is a private ground.

SHEEN'S BURIAL GROUND, Commercial Road.—This also is a private burying place. The proprietor of this ground is an undertaker. He has planted it with trees and shrubs, which are sufficiently attractive, but the ground is saturated with human putrescence.

TRINITY EPISCOPAL CHAPEL, Cannon Street Road.—The burying ground at the back of this chapel is large, and very much crowded. The fees are low. Many of the Irish are buried here, and bodies are brought from very distant parishes.

There is a school room for children at one end of the ground, built over a shed, in which are deposited pieces of broken-up coffin wood, tools, &c.

MARINER'S CHURCH, Well Close Square.—This was formerly used as a Danish place of worship, but has since been purchased by the "Rev." G. C. Smith, better known as "Boatswain Smith." There is a burial ground adjoining the church, and a vault underneath it; but this is now never used. The ground is very full; many foreigners have been inhumed here.

BUNHILL FIELDS, City Road.—This old established Dissenting burial ground contains about seven acres. It was originally let on lease to a Mr. Tickell; it was first opened in 1665. More than one hundred thousand interments are supposed to have taken place in it. The monument to the Rev. John Bunyan contains the following inscription:

JOHN BUNYAN,

AUTHOR OF THE PILGRIM'S PROGRESS.

ост. 31 лид. 1688.

Æт. 60.

Until a few years ago, the average annual number buried in this ground was about a thousand; the fees were increased, and the number now averages about seven hundred.

ST. LUKE'S, Old Street—There are three burying grounds belonging to this parish; two adjoining the church, and the poor ground, in Bath Street. Those near the church are spacious; some of the graves are very deep. The grave digger assured me, that he had often experienced the effects of the effluvia arising from the coffins, to an alarming extent, a frequent occurrence when coming suddenly upon a fresh grave, where the body had been kept too long before interment; then the effluvium would penetrate through a foot and a half or two feet of earth, and frequently produced nausea and loathing of food. He stated that many accidents arose from neglect or carelessness; a grave partly dug and left exposed for a night would, for instance, become dangerous from the collection of "foul air."

The poor ground is at the back of the alms-houses, in Bath Street; an improved system of interment is adopted in this ground. The vaults underneath the church are less used than formerly, on account of the cemeteries round the metropolis, but the smell from them is particularly offensive,—so much so, that I was informed by the Rev. Dr. Rice, the present Curate, that he never ventured to descend, but invariably performed the funeral rites whilst standing in the passage, at the top of the entrance to the vaults.

CLERKENWELL CHURCH .- There are four burying grounds belonging to this parish, besides a vault underneath the church; two of the grounds adjoin the church, a third is behind the prison, and the fourth or poor ground, is in Ray Street, the entrance to which is through a private dwelling house, occupied by a broker. It formerly was occupied by a butcher, named Rope, who had his slaughter-house and stable at the back, and immediately adjoining the burial ground. About fifteen years ago, during the residence of this man, it was discovered that several bodies had been exhumed and placed in the stable, close to the slaughter-house; the inhabitants of the vicinity were powerfully excited, and the man, who had for many years earried on an extensive business, was descrivedly ruined, and driven in disgrace from the neighbourhood. All these grounds are erowded, and in disorder; in the poor ground little regard is paid to the depth of the graves, or the removal of the dead. In this filthy neighbourhood fever prevails, and poverty and wretchedness go hand-in-hand.

SPA FIBLDS.—This ground was originally taken for a tea garden; the speculation failed, and a chapel was built upon it, in which some ministers of the Church of England preached. The Bishop refused to consecrate it, and it was ultimately bought by Lady Huntingdon; she inducted one of her Chaplains, and it is now much frequented. The burying ground is very large, but absolutely saturated with dead.

This place offers a difficult problem for solution;—no undertaker ean explain it, excepting by a shrug of the shoulders. I can affirm, from frequent personal observation, that enormous numbers of dead have been deposited here.

ST. JAMES'S BURYING GROUND, *Clerkenwell.*—This is a very extensive ground, and many of the poor Irish are buried here; the place appears excessively erowded. The mortality among children in this neighbourhood, in the year 1839 was very great. This will not occasion surprise when the locality of the burying ground, and the filth and wretchedness of the major part of the inhabitants are duly considered.

St. Ann's, Soho—There is only one burying ground belonging to this parish; it is walled in on the side next to Prinees Street; close to this wall is the bone house; rotten eoffin wood and fragments of bones are seattered about. Some graves are only partly filled up, and left in that state, intended, probably, for paupers. The ground is very full, and is considerably raised above its original level; it is overlooked by houses thickly inhabited. The inhabitants of the neighbourhood have frequently complained of the past and present condition of this place. The numbers of dead here are immense.

ELIM CHAPEL, Fetter Lane.—This chapel has a vault underneath it, crowded with dead; it much resembles the state of Enon ehapel. A report is currently circulated, that some time ago, water had forced a passage into this vault, and that the stench proceeding from it had produced injurious effects upon the health of the inhabitants in the immediate neighbourhood.

ST. SAVIOUR'S CHURCH, Southwark.—The burial ground adjoining the church is very full. The poor ground, called "Cross Bones," in

Red Cross Street, Union Street, Borough, also belongs to this parish. The greater portion of this ground has not been opened for some time past, in consequence of its very crowded state; on the 20th February last year, a vestry meeting was holden "for the purpose of considering the propriety of re-opening the Cross Bones burying ground." The ground had been closed about two years (the time generally allowed for the destruction of the bodies!) and it was moved that it be re-opened; the mover of the resolution stating, that in conscquence of the aversion generally manifested to bury in what is named the "Irish corner," many bodies were taken out of the parish to be buried. This corner, however, had been cleared, and room made for about a thousand bodies. One gentleman argued that "if the graves had been made deeper, hundreds more corpses might have been buried there." Another admitted that it really was too bad to bury within eighteen inches of the surface, in such a crowded neighbourhood; and it was even hinted that "the clearing," viz. the digging up and the removal of the decayed fragments of flesh and bones, with the pieces of coffin, &c. would be the best course, were it not for the additional expense." The funds of the vestry and the health of the living were here placed in opposite scales,-the former had its preponderance. Two charity schools, one for boys and the other for girls, are built at the west end, in Union Street, the back parts of which run into this ground.

There are two vaults belonging to this church, one called the Great Vault, underneath the body of the church. The coffins are piled one upon another; some, which contain branches of the same family, are chained together. All the bodies placed in this vault are buried in lead,—a condition never deviated from. When the vault is opened a fire is always kept burning. On one occasion I accompanied the grave digger to this vault; he received a caution from the sextoness, and hesitated for some time before opening the door. He observed that "he should know, directly he opened the place, whether there was danger." In descending, he carried a lighted candle at arm'slength; he then called out, "there is no danger." The place is extremely damp, and gives out a most offensive smell.

Another called the Bishop's vault, runs underncath the church yard. The coffins are piled upon one another, but the burying in lead is left to the option of the party concerned in the funeral. The smell here is more offensive than in the larger vault.

EWER STREET CHAPEL AND BURYING GROUND, at the bottom of Union Strect, Borough.—The burying ground appears to have been raised nearly six fectfrom the original surface, and is literally surcharged with dead; it is now closed, and presents a very repulsive aspect. It might be instructive to know the number of bodies here inhumed; perhaps,—but dead men tell no tales,—the exhumed might present a formidable array. The vicinity is disgustingly dirty.

DEADMAN'S PLACE.—This burying ground is near to Ewer Street, and is equally surcharged with dead,—the name befits the appearance. Tradition says it took its name from the number of the dead interred there in the great plague, soon after the Restoration,

NEW BUNHILL FIELDS.—This burying ground is situate in the New Kent Road; it is a private speculation, and belongs to Mr. Martin, an undertaker.

It has many attractions for survivors ; the fees are low, the grounds

are walled round and well watched, and the superintendent of the place resides upon the spot. At the entrance of the ground a chapel has been erected; it belongs to the Wesleyan connexion; under this chapel, arched with strong brick-work, is a spacious vault, containing about eighteen hundred coffins. There are not more, I believe, than twelve bodies placed in lead out of the entire number.

A strong ammoniaeal odour pervades this vault; it is not so offensive as that which I have experienced in most other depositories of this description; this I attribute, to the constant transmission of the noxions vapours, (through open iron gratings) to the eireumambient atmosphere.

The burial ground and vault, it appears, have been employed, for the purposes of interment, about eighteen years, during which, not less than ten thousand bodies have been inhumed and deposited, within this "narrow spot of earth," and the vault eonneeted with it. Yet, around this tainted atmosphere, many houses are creeted and boards are placed offering ground to be let upon building leases !

LAMBETH CHURCH.—This is close to the Bishop's Palace. There is a vault under the church, and a burying ground adjoining to it, both of which are for private or family graves. The ground is very full; it is contiguous to the river, and *the soil is very damp*; many of the tomb-stones have sunk into the earth.

At a short distance from the church is another burying ground, belonging to the parish; it is divided into the upper, middle, and lower grounds. It is very much erowded, and the tomb-stones are deeply sunk in the earth; the state of the ground has rendered it necessary to discontinue the practice of interment,—bones are scattered about, and a part of the ground has been raised. The neighbourhood is thickly populated; the soil is very moist, and water flows in at the depth of four feet.

ST. JOHN'S BURYING GROUND, Westminster, is very spacious and over-erowded. The churchwardens have been obliged to give up a part of the ground, for the interment of the poor, which had formerly been set apart, for the more fortunate. The soil here is very damp, and, at a shallow depth, the water flows in abundantly; the depth of the graves varies from four to eight feet.

ROMNEY STREET CHAPEL, close to St. John's burial ground.—This is a Baptist place of worship, with vaults underneath, not unlike those under Buckingham chapel, but not so large. The smell from the vaults is exceedingly offensive, and produces a feeling of nausea.

BUEKINGHAM CHAPEL, situated in Palace Street, about three minutes' walk from Buekingham Palaee. There are two vaults and a burying ground belonging to this chapel; one of the vaults is *underneath very large school rooms for boys and girls*, and the other is *underneath the chapel*. The entranee to these vaults, is through a trap-door, in the passage dividing the school rooms from the chapel; steps lead to the bottom of the building; on the right, is the vault underneath the schools. When I visited this place a body had reeently been interred, and the effluvium from it was particularly annoying. The vault is supported on wooden pillars, and there is only one grating which fronts the street, to admit light and air. The floors of the school rooms, white-washed on the under surface, form the roof or ceiling of the vault. It is no difficult matter to see the children in the lower school room from this vault, as there are apertures in the boards sufficiently large to admit the light from above. This place is spacious, but very low;—the vault on the left, under the ehapel, is about the same size as that under the schools, though much lower. I was assured that the ground was so full of bodies, that there was difficulty in allotting a grave. The roof of this vault, is formed by the under surface of the floor of the chapel; the light passes through it; the smell emitted from this place is very offensive. In the vault underneath the chapel there are piles of bodies placed in load; the upper ones are within a few inches of the wooden floor.

On a level with the chapel, and behind it and the school rooms, is the burial ground, which is much crowded,—most of the graves being full 7 feet deep, and nearly filled to the surface, with the dead. The ground is raised, more than six feet from the original level,—formed only by the debris of mortality.

Interments are allowed, in either vault, in lead or not.—if not in lead, two wooden cases are required, a shell, and an outer coffin.

I could not but feel surprised that in the very atmosphere of the Palaee, such a nuisance as I have just described—a nuisance, pouring out the deadly emanations of human putrescence, should be allowed to exist—still more so that it should be permitted daily to inerease. It is now exposed, when will it be denounced? Surely the guardians of Her Majesty's health, will not risk the consequences of negleet.

CHAP. III.

DISGUSTING PRACTICES IN BURYING GROUNDS.

From the preceding description of a few (and but a few) of the metropolitan burying grounds, it will be seen that by far the greater number are erowded even to excess. This certainly ought not to have been permitted. The moment it appeared that the space allotted for interment, was occupied—*that* moment the ground should have been closed, and other asylums set apart for the interment of the dead : an infringement upon the occupancy of the unresisting tenant violates the property of survivors, and descerates the sanctity of the sepulchre. Men pay *funcral dues* under an implied assurance that the "dead" shall be "respected."

It is well known, that formerly, considerable alarm was manifested that the grave would be robbed of its deposits by the intrusion of the "resurrectionist." An Act of the Legislature had the effect of destroying the temptation to purloin the dead, but the grave is still inseeure. Grounds, accustomed to be held sacred, are unceremoniously cleared under *official* superintendence; and that too with such ruthless indifference and wanton publicity, that even passers by complain of the indecent profanation.

I shall now show by what arrangements the superfluity is reduced, and room made for subsequent interments; and in doing this, I shall restrict myself to a brief enumeration of some of the particulars.

The means employed to effect the purposes contemplated, consist in what, by the grave diggers, is called "management."

In this "management" of the ground, former occupancy is disregarded. Coffins are remorsclessly broken through, and their contents heaped together, in wild confusion, or scattered carelessly over the surface, exposed to " insult lewd and wantonness."

Great expense is frequently incurred in funcrals. The encasement is often strongly made, and highly ornamented; and yet (perhaps, therefore) second-hand "coffin furniture," (nails, more especially,) may be found by the hundred weight, at many of the "dealers in marine stores," nor can we wonder that coffin wood has been extensively used as an ordinary fuel in low neighbourhoods. The gases produced by the decomposition of the dead, arc partially soluble in water; and a fatty pellicle is instantly formed in large quantity. The wood, saturated with these dissolved gases, and used as fuel, must diffuse, in addition to the exhalations constantly given off from bodies in vaults, and on the earth's surface, vast volumes of gaseous poison.

In a burying ground, in Southwark, an application was made for a grave; the grave digger said, "there was no room, except for a relative, and only through management could room be made!" He was interrogated concerning his "management"—He replied "he would be a fool to tell any one how he did it." It was observed to him, that the place appeared to be dreadfully crowded, and it was feared there was not sufficient depth. "Well," observed the man, "we can just give a covering to the body."

A poor widow, to evidence her affection for her departed husband, had seriously diminished her resources, to defray the funeral expenses. The coffin was covered with black cloth, and was some time after identified by the maker of it,—it was nearly covered with lime.

An undertaker, who had the charge of a funeral, went with a friend into the vault of a chapel. A coffin, recently deposited, was taken under his arm with the greatest ease; his friend, doubting, poised the coffin, and was affected to tears, from the conviction that the body had been removed. Several other coffins were in the same condition.

The workman, in digging a grave in the burying ground of a chapel, much frequented, broke in upon a common-sewer, and deposited the coffin, there. The brother of the deceased insisted upon its removal; he compelled the man to place the body in the vault until another grave was dug; then dared him to remove it, and cautioned him not again to dig a grave for a human being, entering the common sewer.

In the vaults of a church centrally situate, the burying ground of which is, on the surface, in a most disgusting condition, a nobleman, and several other persons of distinction, had found their last resting-place.

In the year —, a rumour arose in the parish, that the rights of sepulture had been grossly violated; enquiries were instituted, men were employed to replace the bodies in the shells that were left, and from which the lead had been stolen; a hole was dug, into which the remainder of the bodies were thrown. The grave digger was privately examined before a magistrate; but as it was found that any proceedings against him would implicate others, the affair was hushed up, and the vault, which had undergone a thorough clearance, was thus again made available for the purposes of interment,—again, perhaps, to be subjected to a similar purgation, when the cupidity of the grave digger may be in the ascendant, or the want of room shall require it.

Four coffins, out of upwards of fifty, alone escaped these brutal depredators of the dead,—that which contained the remains of the nobleman, which it was expected would rest ultimately in —, according to his last wish, and three others, secured by strong chains, passing through their handles at each end; these were padlocked, and the keys were kept by the survivors.

In March 1841, another fatal proof was afforded of the shocking condition of the soil of the London grave yards. The grave digger of Sr. BRIDE's, Fleet Street, and two assistants were employed in opening a pit 20 feet deep for the interment of the dead. Two of the men more practised than the third, escaped, large quantities of earth and an entire pile of coffins fell upon and crushed the man who was unable to get out of the grave. Such was the rotten state of the ground-that as the men dug, it fell in in masses and upwards of seven hours were employed, in the most severe and indefatigable exertions, before he could be recovered, although the labourers had every mechanical assistance that blocks, falls, pullies, hooks, &c. &c. could afford. His head pressed against the end of the pit was discovered after two hours digging. As if in revenge for the insults offered them, two dead bodies had rested themselves on his chest, whilst his legs, jammed between other coffins and embedded in the earth could not for many hours be extricated. Thus another "grave yard " has divulged to the many the secret of its condition—which has long, however, been known to the few.

So effectually—so diligently had this ground been worked, so well charged with rottenness and corruption—so well incorporated with the bones—flesh and tissues of decayed and decaying human bodies—that the natural cohesiveness of the soil had been destroyed—thus "the loose state of the ground was such that as fast as the workmen dug the earth it continued to fall in on all sides." Need I say one word in addition, yet the moral will be the more deeply impressive if I add, that the poor fellow named Thompson, was, when his existence was terminated in the shocking manner above related, 22 years of age, and the sole support of an aged mother.

It is well known to those engaged in burying the dead, that when leaden coffins are employed, the expansive force of the gas, and the consequent bulging out of the coffin, compels the workmen frequently to "tap" it, that the gas may escape. In some instances, the coffin may be turned round upon its axis, by the slightest touch of the finger, within a few hours after the lid has been soldered down, and holes are frequently bored through all the cases, over which the plate of the outer coffin is fastened; so that the gas may gradually escape into the room or vault in which it is deposited. When the coffin is not well secured, the lead will burst, and the gas become generally diffused.

The following extract from a weekly paper of June 14th, 1840, discloses the existence of a very revolting practice.

"A constant subscriber informs us, that a few days since,

he was passing in the rear of the Tabernacle, in Tottenhamcourt-road, to which is attached a public burial-ground, when his attention was arrested by a strong sense of something burning, and which from its character he had no doubt was animal matter. Curiosity led him to the immediate spot, when, upon inquiry, he found that some of the bones of the dead were being consumed, and the dense exhalation from the chimney was the product of the consumption. We have only to observe that, if this disgraceful practice is to be continued, the line of houses in St. John-street, which is in the immediate vicinity of the chapel, will soon be untenanted. It is the duty of the landlords to look to the matter, and indict the parties; or the police may summon them before a magistrate, who is empowered to inflict a fine of $\pounds 10$."

Extract from the report of an inquest held at Chelsea, by T. Wakley, Esq., M.P., and Coroner for Middlesex,-The highly injurious and abominable custom of placing masses of bodies one upon the other is here and in too many other places practised .--- " In the month of August, 1840, a poor man died at a wretched hovel in Paradise Row, Chelsea, and was buried in the usual way by the parish—a judicial enquiry was instituted, and it was necessary to exhume the body; the grave digger opened the hole, and after searching for some time, he declared his inability to find it. The coroner enquired of the summoning officer the precise number of bodies interred in the same pit-the officer replied, ' to the best of his recollection there were 26 bodies.' The coroner wished to be informed if they rammed them in with a rammer !---the officer said he 'was not aware that they resorted to such a process, but the bodies of paupers were packed together as closely as possible, in order to make the most of the space!' The coroner observed, that such a system of burial was revolting to humanity, and reflected the highest disgrace on a Christian country."

Another circumstance intimately connected with the present mode of interment must be noticed. It is well known to grave diggers that in many cases it would be impossible to dig a grave in the midst of a mass of coffins, without taking great precautions. Some employ water, lime-water, &c. as absorbents; others throw down lighted paper, straw, shavings, &c. &c., and thus the heavier gases are rarified by heat and driven off from the numerous laboratories of human putrefaction distributed in patches over the entire surface of London. These gases once diffused in the atmosphere, are permanently mixed with it, are applied to the skin, and enter the lungs with every inspiration.

I have conversed with many grave diggers in various parts of London; there is not one who has not at some time or other been more or less seriously affected in the execution of his work. Some have informed me that they have been obliged to fill up graves which they had attempted to dig—they were so overpowered by the effects of the gas. Many when employed in digging graves in cold weather, have noticed that the earth "reeks with noxious vapour" —condensed gases are at times perceptible to the eye; they have a faintish smell"—irritate the nose and eyes—produce debility—and injure the appetite. At a depth of some feet from the surface, they are frequently insupportable; and every old and experienced grave digger keeps his head as erect as possible.

It will be noticed also, from the description I have given of the humid condition of the soil in many grave yards, that no attention whatever has been paid to the kind of earth most suited to the purposes of inhumation. Now this should have been a primary object—putrefaction going on much more rapidly in moist than in dry situations.

I have already adverted to the fact of bodies being placed within a few inches of the surface of the earth; and shown that many thousands of bodies, or rather shells, piled one upon the other, are to be found in the vaults of churches and of chapels. It would appear, indeed, that mourners, after they have seen

> "The deep grave receive the important trust And heard the impressive sentence—dust to dust."

imagine that they have performed the last duty to their deceased friend : have they ever reflected that they have deposited a centre of infection to the living?

It may be said that in many instances graves are dug to a great depth. I know that this is sometimes true, although in very many instances deception is practised in respect to the depth of graves. To give an *appearance* of depth the earth is thrown up on each side to a considerable height, and planks are placed edgeways to prevent the earth from falling in. I also know that an inducement is held out to the grave digger of an additional shilling or eighteen-pence for every foot of ground excavated beyond a given depth, but to accomplish this, it often happens that every opposing obstacle is cut through, and that the legs, the head, or even the half of a body are frequently dissevered.

Thus, among all classes of society, those who have been loved during life, and to whose remains the last affectionate duties have been paid, are, after they have passed for ever from our sight though they may dwell in our remembrance—subjected to the most disgusting indignities. Even the enormous fees paid in some places cannot secure for our dead undisturbed repose. "The pride, pomp, and circumstance" of a funeral are a bitter jest—a biting sarcasm: the bodies of our wives, our daughters, our relatives, are to be exposed to the vulgar gaze, the coarse jests, and brutal treatment of ruffians, who being men, would not, dare not, execute the tasks imposed upon them. But these persons, for necessity may have compelled them to the employment, are comparatively innocent. The abuse—the criminality of the act rests with those who superintend or connive at the transgression.

The above remarks are applicable to a vast majority of places I have examined, and of which I have not considered it necessary to detail the particulars. They indisputably prove, that the present system of inhumation, (and it is not confined to the metropolis,) is grossly immoral, and demands—imperiously demands, the interference of the Legislature to abolish or reform it.

But what shall we propose upon the subject of *Private Burying Grounds?* Unquestionably, that they be immediately and for ever closed; and that the proprietors, presuming that they have not acted illegally, receive a just compensation for their interest in the

LAND ONLY; and that the dead there deposited remain undisturbed until a general cemetery or cemeteries be appointed to receive them, after a decent exhumation, and a solemn and appropriate transmission. It is true that a correct registry of burials may now be anticipated: why not a registry of the burial grounds (not one of which should be PRIVATE)—the situation—the extent of ground-the numbers buried-and the period they have remained open? A particular space can only receive a limited number; that number having been deposited, the ground should be closed, and no disturbance should on any account be permitted, but under the direction of an approved and responsible superintendent. I have been led to these remarks from considering the state of the private grounds which have fallen under my own observation, and as examples are always more influential than vague generalities, I would refer my readers to the particular description already given, of the management of the SPACE under the floor of Enon Chapel in Clement's Lane.

This space measures in length 59 feet 3 inches or thereabouts, and in width about 28 feet 8 inches, so that its superficial contents do not exceed 1,700 square feet. Now, allowing for an adult body only twelve feet, and for the young, upon an average, six feet, and supposing an equal number of each to be there deposited, the medium space occupied by each would be nine feet: if, then, every inch of ground wore occupied, not more than 189 (say 200 in round numbers) would be placed upon the surface; and admitting (an extravagant admission most certainly) that it were possible to place six tiers of coffins upon each other, the whole space could not contain more than 1,200; and yet it is stated with confidence, and by credible authority, that from 10,000 to 12,000 bodies have been deposited in this very space within the last sixteen years!

Is this place a sample of other private burying places? It is, I fear, but an epitome of a numerous class. My enquiries have convinced me that private speculations should at all times be held in suspicion, and closely scrutinized.

CHAP. IV.

EFFECTS OF BURYING IN CROWDED LOCALITIES.

The consequences resulting from the practices deprecated in this work, have already been glanced at, but a few additional facts may tend still further to impress the public mind.

I have stated that in Clement's Lane, and at the upper end, which adjoins Clare Market, and is called Gilbert Street, the disease called typhus fever "had made the most destructive ravages." The mortality in this lane has been, at periods, excessively great; the instances of sudden death have been numerous, and cases of modified disease,—examples of action without power,—involving, perhaps, no particular organ or tissue, have very frequently come under my notice. The inhabitants occupying the houses looking over the open space of the burying ground in Portugal Street, have, perhaps, suffered most. The exhalations of the grave yards in this neighbourhood, it may reasonably be inferred, have increased the malignancy and putridity of disease; the poor man's residence overlooks his grave. May it not, then, fairly be stated, that cause and effect have here been constantly in operation, and constantly increasing in the ratio of the mortality. Can we believe that the power of infection ceases when the animating principle has departed, when the solids are contaminated, —when the blood, poisoned at its source, and in its whole current affected, ceases to stimulate the central organ of the circulation the heart? If, during the period in which life and death are struggling for the mastery,

> "Whilst the slow staggering race which death is winning, Steals vein by vein, and pulse by pulse away,"

the living can be infected by contact or proximity,—shall they not be diseased by the bodies from which the conservative principle has departed ? When the poison that has destroyed life, is disengaged by the decomposition of the tissues with which it was in combination,—when, as in severe forms of typhus fever, the vitality possessed by both solids and fluids, is of the lowest degree, we may fairly conclude, that in proportion to the degree of putrescency evidenced during life, will be the degree of danger to the living, from the emanations of the dead.

A short time since, two bodies were deposited in a burying ground in my neighbourhood. They were placed in one grave, the uppermost body being only a few inches from the surface. Such was the intolerable stench arising from the bodies, that those engaged could not approach within several feet of the grave. I am convinced that many attendants at funerals, conducted under such circumstances, pay a fearful tax in the depreciation of their health the almost inevitable result of their exposure to the exhalations of the dead. If these persons could be tracked to their homes, very frequently disease would be found, the result of exposure to a "malaria," whose dangerous effects, in this country at least, seem neither to be understood nor appreciated.

In the month of June, in the year 1835, a woman died of typhus fever, in the upper part of the house, No. 17, White Horse Yard, Drury Lane; the body, which was buried on the fourth day, was brought down a narrow staircase. Lewis Swalthey, shoe-maker, then living with his family on the second floor of this house, and now residing at No. 5, Princes Street, Drury Lane, during the time the coffin was placed for a few minutes, in a transverse position, in the door-way of his room, in order that it might pass the more easily into the street, was sensible of a most disgusting odour, which escaped from the coffin. He complained almost immediately afterwards of a peculiar coppery taste, which he described as being situated at the base of the tongue and posterior part of the throat; in a few hours afterwards, he had at irregular intervals slight sensations of chilliness, which before the next sunset had merged into repeated shiverings of considerable intensity. That evening he was confined to his bed,-he passed through a most severe form of typhus fever ; at the expiration of the third week, he was removed to the fever hospital and recovered. He had been in excellent health up to the instant when he was exposed to this malaria.

Mr. Mason, a patient of minc, some years since was exposed to a similar influence. A stout muscular man died in his house in the month of June, after a short illness; on bringing the body down stairs, a disgustingly fetid sanics escaped from the coffin in such considerable quantity, that it flowed down the stairs. Mr. M. was instantly affected with giddiness, prostration of strength, and extreme lassitude; he had a peculiar metallic taste in the mouth, which continued some days; he believes that his health has been deranged from this cause.

My pupil, Mr. J. H. Sutton, accompanied by an individual, for many years occasionally employed in the office of burying the dead, entered the vaults of St. ----- church, and a coffin, "cruelly bloated," as one of the grave diggers expressed it, was chosen for the purpose of obtaining a portion of its gaseous contents. The body, placed upon the top of an immense number of others, had, by the date of the inscription on the plate, been buried upwards of eight years. The instant the small instrument employed had entered the coffin, a most horribly offensive gas issued forth in large quantities. Mr. S. who unfortunately respired a portion of this vapour, would have fallen but for the support afforded by a pillar in the vault. He was instantly seized with a suffocating difficulty of breathing (as though he had respired an atmosphere impregnated with sulphur); he had giddiness, extreme trembling, and prostration of strength; in attempting to leave the vault, he fell from debility; upon reaching the external air, he had nausea, subsequently vomiting, accompanied with frequent flatulent eructations, highly fetid, and having the same character as the gas inspired. He reached home with difficulty, and was confined to his bed during seven days. The pulse, which was scarcely to be recognised at the wrist,-although the heart beat so tumultuously, that its palpitations might be observed beneath the covering of the bed clothes,-ranged between one hundred and ten and one hundred and twenty-five per minute, during the first three days; for many days after this exposure, his gait was very vacillating.

The man who accompanied Mr. Sutton was affected in a precisely similar way, and was incapacitated from work for some days. His symptoms were less in degree; prostration of strength, pains in the head, giddiness, and general involuntary action of the muscles, particularly of the upper limbs, continued for several days afterwards; these symptoms had been experienced, more or less, by this person, on many previous occasions, but never to so great a degree. I have myself suffered from the same cause, and been compelled to keep my room upwards of a week.

In a burial ground in Chelsea, within the last two years, a grave digger was employed in preparing a grave close by a tier of coffins; he had dug about four feet deep, when the gas issuing from the bodies exposed affected him with asphyxia; he was found prostrate; assistance was obtained, and with some difficulty he was re-covered.

In the month of August, in the year 1835, a vault was opened in the aisle of the ehurch of Little Birkhampstead, Herts; the body of a child had been placed in this vault about fifteen months pre-Upon removing the stone, a peculiarly offensive smell viously. was emitted; the vault was found nearly full of water, in which the coffin was floating. My informant, the then sexton, Benjamin Smith, now living No. 8, Princes Street, Drury Lane, was instantly affected with nausea, followed with diarrhœa, excessive trembling, prostration of strength, and loss of appetite; and these symptoms continued some weeks. He believes that his health has seriously suffered in consequence. The bricklayer and labourer employed in opening the vault and taking out the water, were also affected, and Mrs. Smith, whilst cleaning the inside of the church, several days afterwards, was sensible of a very effensive odour, which was perceptible during divine service on the Sunday following.

William Jaekson, aged 29, a strong, robust man, was employed in digging a grave in the "Savoy;" he struck his spade into a coffin, from which an extremely disgusting odour arose; he reached his home, in Clement's Lane, with difficulty; complained to his wife that he had " had a turn ; the steam which issued from the coffin had made him very ill;" he had pain in the head, heaviness, extreme debility, lachrymation, violent palpitation of the heart, universal trembling, with vomiting. His wife stated that the cadaverous smell proceeding from his elothes affected her with trembling, and produced head ache; she mentioned that she had been before affected in a similar way, although more slightly, from the same eause. Jackson recovered in a few days, although considerably debilitated. Compelled by the poverty of his circumstanees, he attempted, seven days afterwards, to dig a grave in Russell Court, Drury Lane. In this ground, long saturated with dead, it was impossible, without disturbing previous occupants, to select a grave; a recently buried coffin was struck into; the poor fellow was instantly rendered powerless, and dragged out of the grave by John Gray, to whom he was an assistant. Jackson died thirty-six hours afterwards. This ease occurred during the visitation of the spasmodic cholera, and his death was attributed to that eause.

Mr. Paui Graham, residing in my immediate neighbourhood, had buried a child in Russell Court, Drury Lane. An aequaintance of his was buried in the same ground a few weeks subsequently, and as the survivors had a suspicion that this body had been exhumed, an undertaker was employed to ascertain the fact. Mr. G., accompanied by another person, was present during the time the lid of the coffin was partially removed; a most offensive effluvium was emitted; he was affected with instant vomiting, head ache, confusion of intellect, prostration of strength, and trembling; the other person became unwell from the same cause; the undertaker had carefully averted his head during the partial removal of the lid of the coffin, and thus escaped its effects. Mr. G. stated to me that no sensation of disgust could have occasioned these symptoms, as the body was not exposed. He has, to this day, a vivid recollection of the offensive odour.

A grave digger was employed, a short time ago, in the ground of St. Clement Danes, Strand. He had excavated a family grave to the depth of sixteen feet, and when the coffin was to have been lowered, he went down by the boards on the sides to the bottom of the grave, and had what is called "a turn;" he felt as if he had his mouth over brimstone (the taste was "sulphury"); he called out, but was not heard; he then motioned with his hands, and a rope was lowered down; he seized hold of the rope, and was pulled up to the surface; he was "queer" for a day or two.

The following important fact was communicated to me by one of the parties immediately concerned :---

A lady died September 7th, 1832, and was buried in the Rector's vault, in St. ----'s ehurch, on the 14th. The undertaker had oceasion to go down into the vault, near the communion table; he had done the work of the ehurch nearly thirty years, and was well aequainted with the localities; the grave digger had neglected to take up the slab which covered the vault; the undertaker being pressed for time, with the assistance of the son of the dcceased, removed the stone. The two descended, taking with them a light, which was almost instantly extinguished; upon reaching the lower step of the vault, both were simultaneously seized with sickness, giddiness, trembling, and eonfusion of intellect; the undertaker raised his friend, who had fallen on the floor, and with difficulty dragged him out of the vault; he himself, although a man previously in excellent health, was seized with vomiting the next day, and for twelve months rejected his food ; at the end of this period, after having been under the eare of many medical men, he eonsulted Dr. James Johnson, from whom he derived great benefit; the Doctor pronounced his case to be one of poisoning, from mephitic gases. The patient is convinced that his health has been completely ruined from this eause; he is now obliged, after a lapse of seven years, "to live entirely by rule-" The young gentleman who was with him, was subsequently under the eare of many medical men upwards of two years; his principal symptoms, those of a slow poison, developed themselves gradually,-but surely; he was attacked with obstinate uleerations of the throat, which were not removed until more than two years had elapsed, although he had frequent change of air, and the best medical assistance that eould be obtained.

Mr. Tumbleton, a highly respectable undertaker, of No. 4, Warwiek Street, Golden Square, informed me that about cleven years ago, he attended the funeral of an "Odd Fellow," on a Sunday, at ENON CHAPEL (particularly mentioned in the preceding pages); he smelled a disgusting stench; he was seized, within forty hours, with a violent pain in the back of the left hand, continuing about an hour; had "eold chills" within half an hour afterwards; took a glass of rum and water, and went to bed; he arose in the morning very ill, and consulted Dr. Burnett, of Golden Square, who ordered him home, and told him that he would "give him three weeks before he got up again." This prognostic was true to a certain extent, for the patient kept his bed nine weeks, with a malignant typhus, and all its concomitant evils.

On the 10th of July last, I was called to attend a widow, named Adams, house-keeper to a gentleman residing in Gray's Inn Square; some days before my arrival, she had been attacked with pain, which she referred to the region of the liver. The pulse, on my first visit, was weak and easily compressible, ranging between one hundred and twenty and one hundred and thirty; she complained of no pain; her heart beat tumultuously; the tongue was brown and dry, and protruded with difficulty—her general symptoms were those of action without power. I carefully watched the case; but, notwithstanding all my efforts, my patient sunk on the 22nd of the same month. She had been a regular attendant at *Enon Chapel*. She died of typhus, accompanied with symptoms of extreme putrescency. Can the cause be problematical?

Four bodies had been placed in a tomb in the Eastern Cemctery, into which it was found water had penetrated, the first body had been interred in February, 1836, the last in April, 1839. Two grave diggers employed in the removal of the water and the dead bodies, were from the commencement of their labour struck with the fetid odour given off, yet they continued their work. They had removed a large quantity of water and two coffins, when in attempting to scize the third, their feet slipped, and the water remaining in the tomb was violently agitated by their fall. One of the men fell instantly lifeless. His comrade made several efforts to raise him, at the third attempt he fell deprived of consciousness upon the body of his unfortunate companion; assistance being quickly rendered, the men were withdrawn from the tomb. The grave-digger who first fell was dead; the other, notwithstanding the extreme attentions of two medical men, remained unconscious during six hours-for the space of a month afterwards he suffered greatly from difficulty of breathing, and weakness of the legs, which in the course of the same month were affected with a general desqua-(Annales D'Hygiene, Sc., January, 1840.) mation.

My remarks published upwards of twelve months since, have unfortunately had too solemn a verification ;- at p. 183 of the "Gatherings from Grave Yards" will be found the following description of the abominable and dangerous condition of the burying grounds of ST. MARGARET's, Westminster. "There are two burying grounds belonging to this parish, one near the Abbey, adjoining the church, and the other in the Broadway, Westminster, the ground is excessively crowded; funerals are very frequent, the ground behind the church is too full to admit of increase, with propriety or safety." Confirmatory of the above description made from repeated personal observation, I quote the following remarks from high authority. " The Commissioners for the Improvements in Westminster, reported to Parliament in 1814, that St. Margaret's church yard could not, consistently with the health of the neighbourhood, be used much longer as a burying ground, 'for that it was with the greatest difficulty a vacant place could, at any time, be found for strang.

ers; the family graves, generally, would not admit of more than one interment, and many of them were then (in the year one thousand, eight hundred, and fourteen !!) too full for the reception of any member of the family to which they belonged." (Quarterly Review, September 1819, p. 380.)

Thus, has this place, abominable as it is, yet perhaps less (if comparison can be made) infamous in its practices than many other, so called burying places, within the intimate knowledge of the writer, produced results, at which *humanity* shudders, and which *religion* should indignantly repudiate.

"William Green, a grave digger, while employed, in his vocation in the church yard of St. Margaret's, Westminster, was suddenly seized with faintness, excessive chilliness, giddiness, and inability to move his limbs. He was seen to fall, removed home, and his usual medical attendant was sent for. The poor fellow's impression was that "he should never leave his bed alive; he was struck with death." He was, subsequently, removed to the hospital, where he died in a few days. No hope was entertained, from thc first, of his recovery.

Mr. B., the medical attendant, was seized with precisely the same symptoms. He was attended by me; I apprehended from the first a fatal result; he died four days after the decease of the grave digger.

The fatal effects of this miasm did not end here. The servant was seized on the day after the death of her master and she sunk in a few days.

There can be no doubt of the fact that the effluvium from the grave was the cause of the death of these three individuals.

The total inefficiency in the three cases, of all remedial means, showed the great power of the virus, or miasm, over the animal economy, from the commencement of the attack."

J. C. ATKINSON, Surgeon,

Romney Terrace, Westminster.

Extracted from " The Lancet," June 13th, 1840.

At a meeting of the London Medical Society, Mr. Hutchinson, Surgeon, related the following case. A girl, aged 14, the daughter of a pew opencr in a city church, came under his care on the 15th of March last. On the Friday previous to his seeing her, she had assisted during three hours and on the Saturday during one hour in shaking and cleansing the matting of the church, situated in the centre of a small burying ground which had been used for the interment of the dead for centuries, and the ground of which was raised much above its ordinary level, and was strongly saturated with the remains of humanity. The vaults underneath the church contained bodies in leaden coffins. The dust and effluvium which arose during the "cleansing," had a very offensive and fetid odour, very unlike the dust which collected in private houses, and had always the effect of making her (the girl's mother) ill, for at least a day afterwards; and used to make the grandmother of Mr. Hutchinson's patient so unwell, that she was compelled to hire a person to perform her duties. The girl suffered under the symptoms of typhus, or putrid fever in a formidable degree. A lady with whom Mr. H. was acquainted—who was in the habit of visiting the church in question, had always head-ache afterwards. A majority of the members engaged in the discussion were of opinion, that the patient's illness had been occasioned by exhalations from the bodies of the dead.

Mr. Pilcher observed that " the Church Yards of the Metropolis were in such a defective state, that it would be a great service to the community if burials within the metropolis were altogether done away with; Mr. P. thought that the effluvia from the mats had been sufficient to produce the fever."

Mr. Dendy said "there was abundant evidence to show the Gave Yards' were highly injurious."

Mr. Leese "had lately attended a lady whom he was obliged to prohibit from going to a church in the west part of London, in consequence of the injury she had sustained repeatedly from the effluvia proceeding from the vaults beneath the building. These vaults were nearly full of coffins piled one above another, some of them having given way from the weight imposed on them."—*Extracted* from the Lancet of May 1, 1841.

It would be easy to multiply similar instances from my own pcrsonal observation, but the limits of the present work will not permit. Since these pages were in the press, Mr. Anderton, at a Court of Common Council, held in the City on Thursday, said that he rose to submit a a motion of importance to both rich and poor. He was able to show that there were the most unanswerable arguments for applying to the Legislature to prevent the sepulture of the dead in future in the City of London, the only great city in the world, he believed, in which the practice was permitted.— (Hear, and cries of 'Refer it at once to a Committee.') Mr. Anderton immediately made a motion to that effect, which was carried by the Court unanimously.

CHAP. V.

CONCLUDING OBSERVATIONS.

I have now, detailed some of the particulars of a long and laborous enquiry, and have placed before my readers a statement of the gross abuses and immoral tendencies arising from the practices now prevalent in the burial places of the metropolis, and with the full conviction that I have, fearlessly, and to the best of my ability, performed an important public duty, in submitting the result of my investigations to the judgment of my countrymen; I look forward with confident anticipation to the cordial co-operation of my fellow citizens, and also to the assistance of the Legislature in annihilating or effectually reforming the present system of burial,—a system fraught as much with insult to the dead, as with extreme danger and affliction to the living.

If I have entered upon a repulsive and disgusting detail, it has been from a profound conviction of its necessity. The profits of private speculators have not as yet been compelled to defer to the vast—the enormous—the invaluable—yet utterly neglected interests of the PUBLIC NEALTH and PUBLIC MORALITY—yet are they too inseparably connected to be dissevered. "Immorality and discuse are multiplied by practices which should only teach ' the resurrection and the life.'* I am much gratified to be able to add, that the Legislators † who regulate the criminal, the fiscal code of the country, are at length convinced of the necessity that exists for their interference with the practices of selfish, unprincipled, or ignorant men—who have forgotten, or will not understand—that " death like life propagates itself."‡ I venture to hope that the health of the metropolis will form a prominent feature in the measures of the Administration, and the attention of Parliament be early directed to enquire into and to adopt such measures as may avert threatening calamities and secure future sanatory improvements

It must be remembered, that although my attention was originally directed to the condition of the burial places in my own immediate neighbourhood; and that although I have been prompted to extend my enquiries into the condition of those in other districts; yet, that taking into consideration the magnitude of the metropolis, the abuses here exposed (and many others that might be mentioned), however repulsive, disgusting and immoral, would not amount to a tithe of the detail, were the investigation pursued under authority and judicious arrangement.

It may I fear, with truth be said, from the burial places of one vicinity—know all the rest. If so, let those who at present supinely look on and disregard the dangers threatening their poorer neighbours from these vast sources of disease, remember that pestiferous exhalations arising from the numerous infecting centres of the metropolis, are no respecters of persons; by the ever shifting gales of the moment, they may be visited, even in their chosen localities, their power of resistance experimented upon, and a severe penalty incurred—the punishment of their omitting or neglecting to avoid evils self-inflicted, and therefore removable.

It is demonstrable that the centres of infection are found principally in crowded neighbourhoods, and a vitiated atmosphere; here they are propagated and nourished by the action and reaction, the cause and effect constantly in operation;—for, in many of these very districts, the so-called burying places, the receptacles for the dead, are situated; their insatiable appetite, yet unglutted, is constantly devouring fresh victims, and these again are ejected, after a slight sojourn, to make room for the succeeding occupants, who retain their situation only by the interest or caprice of a hireling grave-digger.

Upon a matter so intimately connected with the prosperity and happiness of a State, the attention of the Government cannot be too anxiously directed. Who will venture to affirm that the *health* of a community is not of the first importance to the stahility and prosperity of society? Without health,— riches, honours, and distinctions are comparatively worthless to their possessors.—Who

 Morning Chronicle, April 28th, 1841. + Vide, Report of Select Committee on Health of Towns.—Hansard, June, 1840. ‡ Lancet. can doubt but that a healthy people are the most valuable defenders of the soil; the most formidable in war, and the most useful in time of peace? Throughout all ages rulers have unfortunately manifested but little regard to the interests or the amelioration of the condition of the poor, and have resisted every attempt at amendment, until by some dreadful ealamity they have been driven to measures of improvement.

The vast numbers of burying places within the bills of mortality are so many centres or foci of infection—generating constantly the dreadful effluvia of human putrefaction—acting according to the circumstances of locality, nature of soil, depth from the surface, temperature, currents of air—its moisture or dryness, and the power of resistance in those subjected to its influence—(and who is not ?)—as a slow or an energetic poison.

The reflection will obtrude itself on every thinking personhow long is this state of things to continue ? Who is not deeply interested in this question ? Families, home, kindred, relations, friends, the thousand sympathies that have grown with our growth and strengthened with our strength,—are so intimately connected with our subject, that the more deeply we reflect, the more settled is our conviction of the necessity for the interference of the Legis lature upon a point so intimately involving the best interests of society. I have freely and earnestly spoken of the tremendous risk incurred by the mutilations of the resistless dead, portions of whose bodies, in various stages of decomposition, are thus made the instruments of punishment to the living. Yet no attention is paid to remonstrance, urged from conviction; no heed given to warnings, however disinterested, and however urgent.

I would not unnecessarily alarm the public mind, but the opinions I have advanced are not hypothetical; they are founded upon the experience and practices of past ages, confirmed by the experience and practice of the present day: and, yet this momentous subject has hitherto been passed over in total silence, as though insignificant or indifferent, by English writers of eminence, I have, therefore, not hesitated, feeling the γ aramount importance of the question, to throw my mite into the public treasury, hoping to see, at least, as the result of my labours, the enforcement of efficient "Sanatory Regulations" throughout every department of the kingdom, and the ENTIRE REMOVAL OF THE DEAD FROM THE IMMEDIATE PROXIMITY OF THE LIVING.

I may be allowed to state that I am entirely unconnected with any speculation, public or private, having reference to the establishment of Cemeteries. Commending, as I do, the efforts of private individuals, who have originated a reform, which should long since have commenced with the Executive, I am, nevertheless, so fully convinced of the necessity for *legislative interference* to destroy the present dangerous system of inhumation, that I hesitate not to express my opinion, that the *Government* of the country will ultimately be driven to the adoption of means for enforcing the prohibition of the interment of the DEAD in the midst of the LIVING.

APPENDIX.

EXTRACTS FROM

THE EVIDENCE

GIVEN BEFORE

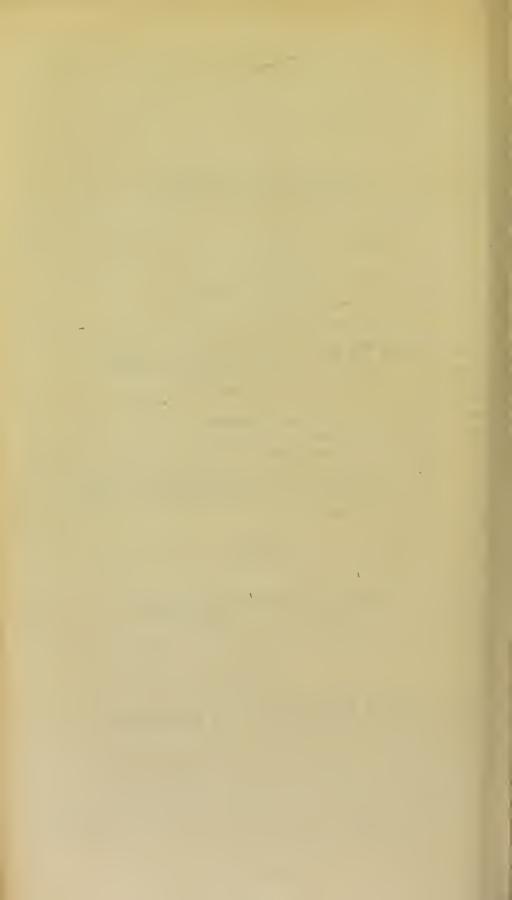
A SELECT COMMITTEE

OF THE

HOUSE OF COMMONS

ON THE

HEALTH OF TOWNS.



APPENDIX.

EVIDENCE GIVEN BEFORE PARLIAMENT.

The following is the evidence given by Mr. Walker before the "Select Committee on the Health of Towns," at two examinations, namely, on the 26th of May and the 4th of June last year. The Committee consisted of the following members :—

Mr. Slaney.-Chairman.

Lord James Stuart, Mr. Mackinnon, Mr. Vigors, Mr. John Ponsonby, Mr. Cowper, Mr. Greene, Mr. Richard Walker, Mr. Wilson Patten, Sir Harry Varney, Mr. Baines, Mr. Oswald, Mr. Tufnell, Mr. Brotherton, and Mr. Ingham.

George Alfred Walker, Esq. called in; and Examined. (May 26, 1840.)

3116. Chairman.] You are a medical man residing in the neighbourhood of Drury Lane, are you not ?-I am.

3117. That is a district surrounded by a populous neighbourhood, with a considerable number of courts opening into it in different directions, is it not?—Yes; but I consider it a good neighbourhood upon the whole.

3118. Are there not some courts in which there is no exit through them ?—Yes ; there is a cul-de-sac, named Wellington Court formerly, and which is now called Nag's Head Court, and others.

3119. Is that inhabited by a considerable number of persons of the poorer class?—It is inhabited principally by Irish. The sewerage is in a very bad state; in fact, there is no sewerage there; there is a contrivance which is a sort of cabinet d'aisance, in which the excrementitious matter has frequently been ankle deep on the floor. I visited the place only yesterday.

3120. Mr. Comper.] Do you mean the floor of the house?—You pass through a passage, you enter the passage door, and in the corner is this place, and a most filthy and disgusting one it is.

3121. Chairman.] Is there any system of eleansing or seavengering there?—There used to be a contrivance that would be something like an ordinary place; there are two holes, and when they are filled with the excrementitious matter it may, perhaps, pass through into a reservoir, or else run over the seat, whichever may chance to happen.

3123. Does the health of the inhabitants suffer in consequence of the want of draining and eleansing, and the neglect of sanitary regulations, in that district ?—Most unquestionably; and it is easily provable.

3124. Does fever prevail in that district to any extent?—Yes; I do not speak of the immediate district, but right and left about it. I have had two most terrible eases of disease in that court lately.

3125. Are there any other courts in the vicinity which, though not so much neglected as that, are somewhat in a similar state ?—Yes; Clement's-lane is a sample of filth and abomination. 3126. Is that also a eul-de-sac?-No.

3127. Are the houses elose to each other ?- The street is narrow, only 15 feet wide.

3128. Is there any good system of sewerage there?-No; the sewerage is bad.

3129. Is there any system of scavengering or cleansing there ?—It is sadly neglected.

3130. Is there any officer whose duty it is to inspect this district, and to give notice to the proper authorities, or to take care that the eleansing is properly done ?—None that I am aware of. There ought to be a power of enforcing it somewhere ; and I have long wondered that whilst in this country so much attention is paid to the protection of the person and property, so little care should be taken of the health of its inhabitants.

3131. Are you aware that the negleet of some sanitary regulations which would tend to promote the health of the poorer classes, is a cause of great expense to the richer classes?—There can be no question about it, and it is also a source of great dissatisfaction on the part of the poor with regard to those above them in authority.

3132. In consequence of the illness arising from the neglect of such regulations, do you conceive that a great burthen is frequently cast upon the poor rates?—There is no doubt of it; and also upon the hard-working surgeon. I am sure I give away from 1007. to 2007. in medicines and attendance every year to sick persons, and I cannot help it, as I am compelled to have those cases come under my notice.

3133. A great cost is also incurred in dispensaries and hospitals, and all other benevolent institutions, that have for their object the relief of the poorer classes when out of health, is there not?—Precisely so; and I was about to say, I take this view of the question, that although these places are good establishments, yet a great deal of disease is caused by the neglect of sanitary regulations, and this neglect is a source of expense that might otherwise be saved. There is one point I wish to advert to particularly, with respect to Drurylane; from Queen-street (I know nothing of the ground plan there), but I think from Queen-street opposite Long Acre, we have no sewerage; the consequence is, that the excrementitious matters are pumped up, and they pass of course on the surface of the gutter; now while these gases are quiescent, little harm is done; but the instant they are mixed with the air, it is breathed by the inhabitants, and becomes noxious, and of course highly injurious to health.

3134. Now with regard to the evils arising from burial-places in the midst of the dense population of London or other large towns, have you made any particular observations upon that?—Yes, I have paid rather particular attention to that subject.

3135. Will you give the Committee the result of your observations ?—I think it is very easily provable, that bodies have been placed, by some system of management, which at present I cannot understand, in spaces utterly inadequate to contain them.

3136. Do you apprehend that the health of the inhabitants in vicinitics close to burying-grounds has frequently been injured ?—I do.

3137. By the effluvia arising from the decomposition of bodies in these burying-places?—I think so, and no conservative power of constitution can resist it.

ii.

3138. Can you state any particular cemeteries or burying-places usar the locality that you are best acquainted with, from which such evils arise?—I know very many, in every one of which that evil exists.

3139. Will you mention a few ?-There is Enon chapel, in Clement's lane, Strand, that is a particular Baptist meeting-house.

8140. Is that in a populous district?—Yes, surrounded with nunierous inhabitants.

3141. Will you mention another ?—There is the burying-ground of Portugal-street, Lincoln's Inn Fields.

3142. Any other?—There is one in Russell-court, Drury-lane, which is excessively full; and there is another in St. Martin's-in-the-fields, in Drury-lane.

3143. Where is that situated ?—That is to the left, on the western side, a little way beyond this court I have been describing.

3141. Are there any other?—Yes; in St. Giles's, and in many other parishes, they are in the same condition; I have examined and described more than forty of them in a work entitled "Gatherings from Grave-yards."

3145. Mr. Comper.] Have you any proof of the injurious effects of these church-yards ?-Yes, abundance of proof.

3146. Of what character ?—Of death arising instantaneously, and deterioration and depreciation of health.

3147. Chairman.] This is not your own individual opinion, but the concurrent opinion of most medical men, is it not?—No; it is not an universal opinion, there are some of a different opinion.

3148. But although there may be difference of opinion as to the evil to health arising from these exhalations, there can be no question as to their being disagreeable and unpleasant to the inhabitants of that vicinity?—Yes; and more than that,—they are decidely injurious to health.

3149. Then although persons may differ about the one, they cannot differ about its being excessively unpleasant and noxious to the inhabitants to have smells of that kind arising ?—No; but life may be destroyed without any smell being perceptible.

3150. Is there any other point upon which you can give evidence referable to sanitary regulations beneficial to the humbler classes in large towns?—I have spoken of the sewerage being very deficient in my neighbourhood; another point is the deterioration of the water. There is a police station-house in Pickett-place in the Strand. Ι was called upon some time ago to attend a family who were just arrived from the country; I had some reason to suspect that there was some generally acting cause, for of upwards of 40 individuals living in this station house, scarcely one of them could be pronounced to be in good health. I instituted some inquiries; made an examination, and found that the pipe conveying the excrementitious matters from the two upper floors ran parallel with and within a few inches of the pipe bringing up the water that supplied the whole of the building. This water was of course drank, and employed for washing and cooking. I requested a little water to be drawn for me, the smell was exceedingly offensive; dissolved excrementitious matters were easily distinguishable.

3151. There was a deterioration of the water from this filthy stuff then ?-Yes; it was dropping, in fact, into the cistern; I went and

examined it, and found the pipe was about four inches and a half in the bore, and in a most wretched state.

3152. Then do you attribute the illness to this cause ?---I do; but I should say that has since been amended; I was there two or three days ago.

3153. Is there any other point you can direct the attention of the Committee to, connected with this inquiry?—I think the proximity of the cabinets d'aisance to the water-butt is a great cause of disease, because these gases pass off, and then they become absorbed to a certain extent. I would also beg to state in general terms that the mortality in Clement's-lanc has been very great.

3154. Can you state what it is in reference to the population?— Yes, at a rough guess I think there are 70 houses, and giving 10 persons to each house, that would be 700 persons, and the mortality has been four per cent. from fever of various grades. There were 41 deaths within 18 months.

3155. That is one in 25, is it not?—Yes; the mortality in this particular lane equals that of the worst district in London, the Whitechapel, and that is calculated from all the causes of death put together.

3156. Independently of the deaths caused by fever, were there not also in that district many cases of persons whose health was injured, and whose forces and powers for industrious purposes were very much lessened, in consequence of the fever?—Most unquestionably; and I have no doubt that a vastportion of the poverty and destitution that exists arises from the combined operation of many causes of disease, that under a good system of medical police would not be permitted to exist.

3157. Does the practice of drinking ardent spirits prevail much in those low districts ?—It does; and that is one point I would wish to touch upon: many persons take stimuli from various causes, and one vastly exciting cause is the condition of the air they breathe.

3158. Do you not conceive that in the neglected localities you have spoken to, in which dirt and disease prevail so much, that these poorer classes frequently fly to spirits as a temporary resource and refuge as it were from the evils around them ?—Yes, constantly. They are smitten by an invisible agent, the bad air they breathe; there is no question that that is one vast cause.

3159. Then these neglected points to which the Committee have adverted, is in one respect the cause of their spirit drinking, and then the spirit drinking becomes in its turn a cause of disease and neglect? —Unquestionably.

3160, Mr. Comper.] Do you mean that the infected atmosphere has a depressing effect upon the people subjected to its influence?

-Yes; it involves the necessity of taking something as a stimulant. 3161. Chairman.] These neglected districts have among them a

great number of children, have they not?—A very great number.

3162. Are there any schools there?—There are.

3163. For the younger children?-Yes.

3164. Are there any play-grounds appendant to those schools? -Not one of them has a play-ground; that is a sad piece of inforformation I am sorry to give.

3165. Is it not almost absolutely necessary to the development of their strength and the spirit and energies of youth, that they should have some place of exercise ?—There is no question about it. I have seen in my neighbourhood 18 children in a room, perhaps not more than 12 feet square, and that too over a receptacle for old bones.

3166. Was the air close and noxious ?-Of course it was.

3167. And injurious to the health of the children? Unquestionably; Enon chapel has been employed as a school-room, and the children have met there over the bodies of the dead, which have been piled up to the ceiling of the cellar beneath; the ventilation is bad, and the rafters supporting the boards of the floor on which these children stand were not covered with the usual defence, lath and plaster.

(SECOND EXAMINATION.)

June 4, 1840.

3460. Mr. Mackinnon.] YOU are a medical man?-I am.

3461. You have written a book on the subject of the burial of the dead in large towns, have you not?-I have.

3462. You have turned your attention a good deal to that subject?-I have.

3463. In the book you have published, you have mentioned the evils arising from the want of ventilation in places such as cul-de-sacs?—I have.

Have the goodness to state to the Committee generally 3464. your observations upon that subject?-I have little to add in addition to what I have previously stated. There is a cul-de-sae in the neighbourhood of Drury-lane, to which I have previously referred. In that court I was called upon to visit four children who had measles; I found them recovering from the eruption, but suffering with symptoms of typhus, complicated with sub-acute inflammation of the mucous coat of the intestines. The place in which they lived is one of the worst in the neighbourhood, being a cul-de-sac called Wellington-court, leading out of Drury-lane on the north-eastern side, approached by a long and narrow passage, most disgustingly dirty, without drainage, and inhabited by characters of the poorest description; the houses appear as though they were never eleaned or whitewashed, and the abominations called filthy are here in abundance. One cause of the gradual though sure deterioration of health had been long in operation, and this, I think, upon inquiry, will be found amongst the poor to be present very generally, viz. the filthy condition of the privies. In this court there is no sub-surface drainage; the substitute resorted to here is one extremely likely to be the least effieient. Instead of the exerementitious matter being earried off, it is suffered to collect in the hole immediately under the seat until it reaches a certain height, when it is conveyed by a pipe into a reservoir, which when full, is in the same manner prevented from overflowing by another pipe communicating with a larger reservoir, in the middle of which is a tub pierced with gimlet holes, so as to allow the fluid to separate from the solid portion; into this inner tub the pipe, conneeted with a pump, enters, and the fluid has been pumped up by the nightman. One person who lived here used to mix up the exerementitious matters deposited during the day to a consistence with water,

and then pour it out on the surface-gutter in the court. No provision being made for the passage of the solid portion, as might be anticipated, all the reservoirs have long since been full; and the two pot de chambres being covered over by boards, the one immediately under the seat of the privy is constantly overflowing; indeed, frequently the soil has forced itself between and through the boards, and has repeatedly been foot deep on the floor and in the yard. Two ehildren recovered; the other two were in succession attacked; one affected with gangrene of the mouth successively lost the whole of the upper lip; the lower jaw was laid bare inside and out, and the roof of the mouth destroyed; petechiæ now appeared, and the child, a most loathsome object, died. The mother now removed into another house in the same court, with the idea of benefiting the other child, a girl, who was in a similar state. This infant, about twelve months old, had, when the boy died, ulceration of the hard palate, denuding the bone and laying bare the alveolar processes all round. It was similarly intractable with the boy's, and successively destroyed the whole roof of the mouth, perforating the palate bones, and eventually opening a communication between the mouth and nose by the mortification of all the intervening parts. The nose was next attacked and removed; the upper lip, detached from its adhesion to the jaw, fell down, and was only prevented from separating itself from it by a small portion of yet sound skin at the angles of the mouth. The lower lip was next affected, and in an incredibly short space of time was nearly destroyed, when death relieved the poor little creature from its sufferings. It is impossible for language to express in too strong terms the horrible spectacle presented to the eye by the poor child, its face hardly recognizable, scarcely human, smelling most insufferably; its hands were almost constantly employed in picking piece by piece away of the remaining portions of the face; yet in this condition was it applied to the breast of the mother.

3465. To what do you attribute that dreadful disease in the child?— However the disease might be produced, unquestionably it would be much increased by the bad air and want of ventilation; it was almost impossible to enter the house.

3466. Do you attribute it in part to want of drainage?—Yes, to the combined influence of both; there has been a great mortality in that court.

3467. Have you any other particulars to state on this subject of ventilation?—I have nothing to add, I think, to what I have stated previously. An efficient Building Act is much required.

3468. Will you favour the Committee with your opinion respecting drainage ?—I may state in general terms, that our neighbourhood is excessively ill-drained. Crown-court, in Little Russell-street, Coventgarden, is the property of the Duke of Bedford; and there, I an sorry to say, the excrementitious matter is pumped up, and flows down the centre of the court. There are many other places. I would mention a second-class house in Stanhope-street; a man named Fairbank, who has resided here two years, has, during that period, been affected with sickness; he is in general good health, but he cannot keep his food on his stomach: "jas for myself, (says his wife) I am much affected in my head with giddiness and violent pain; my child is a year and a half old, and is troubled with siekness. I feel convinced it is from the drain, he is so much better when he is out of it." 3469. Chairman.] Do you feel convineed they were right in their opinion?—Yes; they are all affected in the house. Sarah Jackson, another lodger, states: "During the time we lived in Stanhope-street my family was much affected with sickness and loss of appetite, particularly my husband; my son Charles was so much affected that he could not take any animal food for a long time previous to our leaving the house; now his stomach rejects nothing received into it. I was very much troubled with the head-ache; it has, sinee I changed my residence, entirely left me; July 30, 1839." Then again, in the same house, case 3, Miss Graham writes thus: "I have resided three years in this house; I was in perfect health when I entered it; within the last two years I have been much oppressed at the ehest, attended with sickness, ejecting as it were copperas water; I endure a weakness that I cannot describe; I am relieved whilst out of doors; when I return my old feelings return with me. My sister is never free from the headache more or less; she has sickness at times."

3470. Do you, as the medical man attending them, and knowing the situation in which they were, attribute the symptoms of which they complain to the want of drainage in the district?—I do; I am convinced that is the cause. I have taken this evidence at distinct times, without one communicating with the other; it is impossible not to attribute it to that. I will mention another instance. I have been to a house this morning in Angel-court; a family of the name of Swift lived there some time ago; not one of that family was healthy; the children had flaccidity of fibre; it will be invariably found when a ehild comes from the country, and enters a place where the drainage is defective, it will soon succumb; this will vary according to eircumstances.

3471. Is this court you mention a eul-de-sae?-No. There is another case I will take from a respectable street, Little Russell-street, Covent-garden: "Ann Salt entered the service of a lady in Little Russell-street, Covent-garden; the drain in this house had long been in a most offensive state. This young woman, aged twenty years at the period of her entering this house, was in a firm state of health, had compact muscles, a red lip, a cheerful mind; during many months she was exposed to the action of a poison passing off from the water-closet. As she lived in the kitchen, and indeed slept there, she would of course be exposed during the greater portion of the time to its influence; her health gradually diminished, until at length her strength became so reduced that her sisters removed her in a coach to their lodging in Bear-yard, Lincoln's Inn Fields (this place is in a most offensive condition); I was called to see her, and for some weeks the issue was doubtful; she had a most peculiar appearance of the entire skin of the body. It is my decided opinion that the drains are an immense source of disease.

3472. Mr. *Mackinnon*. | Are there any other particular cases you would mention ?—Such additions to the atmosphere are decidedly injurious.

3173. Your opiuion as a medical man is, that the state of the sewerage in parts of London is most defective, and that it generates the state of disease to which you have referred?—Yes, and many other diseases, by whatever name they may be called.

3474. And that having houses built in the shape of cul-de-sacs is most injurions, by preventing the circulation of air?—Unquestionably.

3475. Your opinion is, that there ought to be further legislative provisions ?—Decidedly; I think it a very hard case that a poor man, without knowledge or judgment on his own part, should come into a locality, not knowing that there are causes constantly operating to depreciate his health; he may get out of it as he can; but frequently a saving of sixpence a week will induce a man to remain; his means may not enable him to remove; he is thus perhaps the creature of circumstances, over which he has no control.

3476. You have no doubt of the loss of life, and disease generated, by the want of drainage in this town ?—I have no doubt of it; it is cause and effect; and it is not merely the loss of life, but it is a serious matter to the health of many in the vicinity who feel the effects.

3477. Is it your opinion that it ought to be prevented, on account not only of the physical but the moral effect it has upon the community?—Unquestionably. If you expose children or adults to degrading influences, you must inevitably deteriorate their moral character; there will be constantly a struggle between moral propriety and physical necessity.

3478. Does not the putrefaction, arising from want of sewerage, generate a desire to drink, or to have recourse to spirituous liquors, from the low feeling it creates ?—That is certainly the case.

3479. Are there any circumstances you can call to mind confirming that opinion?—I think that the grave-diggers as a body would confirm that. They generally drink.

3480. Mr. Greene.] How is the exerementitious matter removed from privies, such as you have described in those courts?—That is generally taken away by nightmen, frequently in the night; sometimes the excrementitious matter is mixed with water and poured out on the surface-gutter of the court. Such things are calculated to demoralize any one, or any set of men. From the end of Queenstreet, opposite Long.acre, to the first sewer in Drury-lane, the excrementitious matter which is frequently pumped up from two houses there runs on the surface; when I have passed that way, I have smelt a filthy smell from the water-closets of these two houses.

3481. How is the solid matter removed?—In carts, or in some instances it passes on the surface of the gutters into the drains.

3482. Is there not a certain degree of generation of foul air produced by the removal of those filthy deposits through the streets ?— No doubt, and it must produce the most injurious effects.

3483. Even the carts passing through adjoining streets must have an injurious effect ?—Unquestionably; we have to bear it in the night as well as the day; according to the law they are not to do this until it has struck twelve o'clock, but many persons are obliged to be about after that hour; and whether they be in-doors or out, it can matter little whether these agencies be put in operation before or after the hour of twelve.

3484. There is a liability to this being thrown over into the street, and a great deal of foul air generated ?—Yes. I may here mention a case of a family in Crown-court: one woman had seven children at one time affected with typhus, and she attributed it to the abominable stench she was obliged to live in.

3485. Mr. *Mackinnon*.] You are the author of "Gatherings from Grave-yards?"—I am.

3486. You have therefore personally examined the principal burying-grounds of the metropolis ?—I have. 3187. Have the goodness to describe to the Committee their state? —The majority of the burying-places in London, whether they be called vaults, cellars, or grave-yards, are in a very dangerous and disgusting condition.

3488. Will you state what, in your opinion, is their physical and moral effect?—I have collected irrefragable proofs of both positions; I have given abundant evidence of their dangerous and immoral influence; I have, since I published my work, become acquainted with many instances, demonstrating the injurious effect of masses of bodies in putrefaction; I calculate, according to the present returns of mortality, we should have at least 5,000.000 of bodies amongst us in a hundred years, taking it at 52,000 per annum. I have no question that the extent of mortality has never been fairly entered until the late excellent Act; it was matter of speculation. I have demonstrated that bodies have been placed in spaces that could not properly contain them; hence has resulted a shocking state of things; the mutilation of bodies, the destruction of their envelopes, with a host of immoral consequences and injurious results.

3489. Chairman.] Have you any doubt of the injurious effects of this practice ?- None. Here is one instance: I speak now of the nursing of bodies in lead, in what are called vaults, in the midst of human dwellings; it is a most injurious practice, and one that ought to be annihilated. The lead cannot confine the gas, therefore the only way to get rid of the nuisance, is to take the bodies away at once, where a sufficient quantity of good air can be found circulating without interruption. During the demolition of the old church of St. Dunstan's, the dead in the vaults were removed. This was found to be a matter of some difficulty and much danger. Several of the labourers employed refused to continue the work. They were well supplied with brandy, and under the influence of a half-drunken excitement, they effected their removal. William Mutton, a labourer, employed, within a few hours after his exposure, complained of a nauseous taste in the mouth and throat, severe pain in the chest accompanied with a cough; his skin subsequently became of a deep yellow tinge, and extremely harsh and dry. This man was at times so affected with the effluvia, that he was compelled to support himself against the wall of the vault. In removing the body of a man who had committed suicide, the gaseous exhalation was so powerful that he was rendered unconscious for a considerable period. He invariably declared that this was the cause of his death.

3490. Do you think it was ?—I should think it more than likely; I have produced a number of results in my work. I will give a recent case:—Thomas Beal, 2, Cromwell-place, Little Shire-lane, a strong compactly-made man, aged 26, has been employed as grave-digger about four years; he was engaged in the month of January, 1840, in assisting William West, the beadle of St. Mary-le Strand, to clean up the rector's vault previous to the reception of the body of a deceased parishioner, who died 27th January, 1840; the vault, a detached building, is entered by steps from the church-yard; two of the men employed were sensible of a disgusting odour, which left a coppery taste in the throat. On the evening of the same day Beale had vomiting, cough, and considerable expectoration, and extreme lassitude during five or six days. Six days after this exposure he consulted me, in consequence of a peculiar cruption, which first attacked the

breast, and subsequently (within two days) spread over the entire surface of the body. On the fourteenth day from the appearance of this eruption a very painful culargement of the glands in the left axilla and the groin of the same side occurred, both of which suppurated extensively during six weeks; he has now, May 5th, 1840, the remains of the eruption over large portions of both arms. I produce this case to show an example of the same poison producing the same results, for William West, who died of typhoid fever, was affected in precisely the same manner, excepting that he had no glandular enlargement; he imprudently entered the vault soon after it was opened for the purposes of ventilation. After his return home he complained to his wife that he had a peculiar,—a coppery taste in his mouth; within a few hours afterwards he complained of pain in the head, nausea, loss of appetite, and debility; in a few days he was attacked by an eruption, which first appeared over the chest, and in a few days had covered the entire body ; he remained a considerable time in a very debilitated state, and it was the opin on of his widow that it was in consequence of his imprudent exposure to the exhalations passing off from the bodies in this vault.

3491. Mr. Mackinnon.] Do you find, as a medical man, that this putrid effluvia, arising from dead bodies, affects all individuals in the same manner, or does it affect different individuals in a different manner?—Unquestionably the man who is accustomed to an office executes it best; grave-diggers in many localities would not be able to do their work but under the influence of strong stimulants. We may take the evidence of medical men. Every man almost engaged in dissection is affected with diarrhœa; let him leave off his dissection for a time, and he will get rid of it; if youplace a man accustomed to the exhalations in the dissecting room he will be frequently affected with diarrhœa. I was myself for three months, in Paris.

3492. Is there anything further you have to state upon this subject ?—I can state other instances, but it appears quite unnecessary.

3493. You state in your work that graves are sometimes left open in this city; will you state any instance ?--- I think it is a most abominable practice; it is done in many instances to save time and to get space. I have one in my own neighbourhood; I examined that grave the other day; that is a representation (producing it.) It was dug 22 feet deep; and within a few feet of the windows of the house; there were ten or a dozen coffins projecting into the grave; I have no doubt some of them had been cut through. My opinion is, that the lighter gases pass off; the heavy gases, the earbonic, oxide and earburetted hydrogen, will fall down to the bottom of the grave. It is generally supposed a candle will not burn in a place of that kind, but I think a candle may be extinguished and yet life retained; I tried a lighted eandle; it was extinguished at a depth of 12 feet from the surface; I requested the grave-digger to cover over the top of the grave, and to throw the depth of a foot of carth upon it. I tried another experiment, and the candle was extinguished at a depth of eight fect. I think we ought not to have those places amongst us.

3491. What place was this ?—St. Martin's-in-the-Fields, in Drurylane; the yard is raised there even with the first floor windows surrounding the place. It is close to the large theatres.

3195. You state in your book a case in which the same poison,

arising from putrefaction, has had a different effect on two individuals; will you explain that?-One was a young gentleman 19 or 20 years of age; the other, an undertaker, a very respectable man, whose name I have given as being poisoned at Enon Chapel, in Clement's-lane. The man went to a church at the west end of the town to prepare for the burial of the mother of the young gentleman; not being acquainted with the grave-digger, he contrived to lift up the stone covering the entrance of the vault called the rector's vault; they were both prostrated on the floor by the gas; the undertaker being a powerful man lifted up and carried out the other The two men were differently affected; the elder, who had been attended by Dr. James Johnson professionally, for two years, could not retain his food ; he assured me that the gaseous exhalation had been nearly the death of his young companion, who had an ulcerated sore throat, had had the best advice and many journeys and changes of air, and it was two years before he recovered. I do not think that the living should be thus poisoned by the dead.

3496. You mention gases arising out of coffins; you consider them as generated in a leaden coffin? Yes; it is impossible to prevent it; as an atmospheric pressure of 30lbs. to the square inch, cannot keep it down, I do not know what can.

3497. Therefore it is impossible burying in a large town to prevent the generation of gases mixing with the air ?—I think it impossible. I have seen coffins quite convex and the screws driven out.

3498. The only effectual remedy would be the removal of those burial-places to country districts, or districts where there was not a thick population ?—Certainly; I do not think any consideration of money should be allowed to interfere.

3499. In proportion as the mass of dead is laid in the ehurch-yard the gas must be increased ?—Certainly.

3500. And in that proportion that must be unhealthy to the neighbourhood?—Yes; I could mention a grave-yard in my neighbourhood where a shower of rain would lay bare the tops of the coffins.

3501. Mr. Greene.] Are there any vaults where the gratings adjoining those vaults, and places for ventilating them, open into the public streets?—Yes; they must be ventilated, or they dare not descend; they have been obliged to leave even the doors of St. Clement's Church, in the Strand, open. On Saturday the 19th of August 1839, it was necessary to open the doors of the church of St. Clement's, from the intolcrable steneh, proceeding, in my opinion, from the dead bodies.

3502. Mr. *Muckinnon*.] Then of course that must be very injurious to the health of the congregation attending there ?—I have no doubt of that; it produces frequent faintings.

3503. Mr. *Greene*.] Are you aware that in the vaults of the church of St. George's, Hanover-square, and Hanover Chapel in Regent-street, the gratings open to the street?—Yes; that is a very frequent circumstance; the ventilation is indifferently performed. At Enon Chapel in Clement's-lane, there is the greatest facility for the escape of the gas into the place.

3504. Mr. *Mackinnon*.] Your opinion is that if the practice of burying in this large town is continued, in the course of a hundred years we should have four millions of dead exhaling their gases to

the injury of the living ?—1 should think at least that number, if the mortality be 52,000 annually.

3505. How long will the gas, in your opinion, remain in the coffin before it is entirely evaporated ?—That would be a very difficult question to answer; I should think it might be kept there for ever under peculiar eircumstances. There was an instance occurred in the church-yard at Hampstead, of a grave-digger striking by accident, not purposely, into a coffin; the body had been buried in lead a hundred years before, and the man was struck down with it; it is impossible to form any conception of the most abominable stench proceeding from the dead.

3506. You have spoken of the injury arising from the gases and putrefaction of animal matter creating those unwholesome exhalations to which you have alluded: will the putrefaction arising from the small quantity of animal matter from one human being buried do material injury ?—Unquestionably, a very serious injury. There is one point which is material, the keeping of bodies in low neighbourhoods before interment; I have seen frequent proofs of the injurious eonsequences resulting from dead bodies being kept too long previous to interment; this ought to be remedied; the periods of burying should be diffused over the entire week. At present the poor bury almost entirely on the Sunday, and frequently if a person dies on the Wednesday, if they have not time to make arrangements previous to the Sunday following, they keep that body perhaps till the Sunday next succeeding. I have frequently known a body kept on the table or the bed in a poor man's room; perhaps he is living in that room, sleeping there, and performing all the usual and necessary offices of the family with his wife and five or six children. I have often wished for an absolute power to compel the burying of bodies under eircumstances of this nature; a child, for instance, dics of the confluent small-pox.

3507. Chairman.] Is there any power to order the burial of a body in such a state?—Not the slightest.

3508. Has the Coroner's Court any power ?—I think not. There are other consequences which sometimes follow with respect to the dead.

3509. Mr. Mackinnon.] What is the longest time you have known those bodies kept?—Twelve and fourteen days. In this eul-de-sac, Wellington-eourt, there were two bodies in the house when the other children were attacked; there the stench was so horrible, the neighbours were obliged to complain; they could bear a great deal, but they went to the parochial authorities about it.

3510. Chairman.] There is no inspector who can be appealed to ?—No; there are no sanitary regulations to meet the case.

3511. Mr. *Mackinnon*.] What would you suggest ?—I may state in general terms, that my intimate knowledge of, and acquaintance with, the scandalous and abominable practices followed in very many places of interment, compels me, however unwillingly, to say it matters little whether the body rests in a poor man's room, or putrefies on the surface of a grave-yard which is incapable of receiving it.

3512. Chairman] From your acquaintance with the bad state of the burial-grounds in London, and with the negligence as to burying at the proper time among the poorer classes, do you not think that it is absolutely necessary there should be a legislative provision for the purpose of preventing burial-grounds continuing in populous cities, and for some mode of compelling burials to take place at the proper period ?—I think that absolutely necessary; the mode of burying, and the tasks imposed upon the men, makes the matter highly injurious in many points of view. In the case of the poor, I an convinced that the indecent disposal of the dead, practised in many grounds, has begotten in their minds feelings of bitter animosity, and consequent estrangement towards the parochial authorities; that I consider as an important matter. I will give a proof. There are burial societies established in most neighbourhoods; I have a book from which I will read rule the eighth; "That as this society is established for the decent interment of its members; if the friends of any member behave so disrespectfully to the member as to bury him or her at the parish expense, he shall be entitled to no assistance." I have seen the most unseemly disputes about these things.

3513. There are great evils arising from the want of sufficient space, and the mode in which the burials take place?—Not merely physical evils, but moral ones.

3514. Mr. Mackinnon.] Is it your impression that the cvils arising from those gases produced by putrefaction, are not merely physically injurious, but also demoralize the people by driving them to spirituous liquors?—I would not perhaps go so far as that; but if we take the instance of the grave-diggers, I would affirm that the system has educated a race of men, and compelled them to execute offices that they ought to shudder at; it is a very frequent circumstance for a grave-digger to cut a body in half.

3515. In consequence of the closeness with which they are packed?—Yes.

3516. He cannot get down to the grave without?—No, he cannot in many instances; and it is not only the making room, but the putrescent carth is thrown up, and the graves are open longer than ought to be permitted.

3517. Is there any benefit or profit arising to the grave-digger from making use of the wood of the coffins?—That I have stated in my book. I took the police to see a sack full of that wood in a court in Carey-street; it is extensively burnt all over London; that *(producing)* t is a portion of a coffin I have brought; the poor creature died in Charing-cross Hospital; she had frequently burnt large quantities of t herself; this wood was drying with a large quantity which the police scized, and the fire was made of this wood when we entered he room. There was a large quantity I brought away, and sent it to he head police-office in Scotland-yard, with my compliments, and hat they had better look into the matter; they sent it to the parish officers, and they said, "Oh, it must be got rid of; the poor are quite welcome to it." This I produce was part of a pauper's coffin. I know a parish in which the grave-digger burns it as common fuel. I asked him whether he felt any stench from it; he said, "Oh, the coplc say it smells now and then;" but he was a drinking man. This state of things has in fact educated a race of men too frequently he most degraded and abandoned; with but few exceptions, they drink to excess, and indeed too frequently they are compelled to stimulate.

3518. The grave-diggers in those close neighbourhoods?-Yes, in he old burying-grounds: thus the sources of physical and moral evil

are in an intimate degree identical; the condition of by far t' majority of grave-yards and burying places in London has been such for many years, that they have not been capable of receiving the annual mortality. There are men who have unblushingly made the disposal of the dead a source of income to an extent that few would believe; some private speculators have long known that a freehold grave-yard is infinitely preferable as a source of profit to any other. The want of space has produced, among other inevitable results, a necessity for the disposing of bodies deposited in places utterly inadequate to contain them; they have been removed by various means, the spade or pickaxe of the grave-digger, or the application of lime. The wood of the coffins has been given away or sold in large quantities.

3519. Mr. *Mackinnon.*] Must not the deposit of a sack full of that wood in a house produce very injurious effects ?—No doubt it must; but the people cannot see those active poisons evolved in their houses.

3520. You say that the poor are not in general aware of those gases impregnating the air, and that no precautions are taken by themto prcvent it?-I cannot see what precautions can do if they and their children live constantly in this atmosphere; thus I have invariably found that when a child or children have come from the country and gone to a badly drained house, in a few weeks they will succumb to the in-There is a chapel in Clement's-lane, called Enon Chapel, to fluence. which I have before referred; there is a cellar underneath it, not covered with a lath and plaster defence, and there is nothing to prevent the exhalations passing up. In this there have been deposited about 12,000 bodies in about 15 years; on an average 30 bodies a week were buried there for a considerable time; it is used as a place of worship every Sunday, and is now occupied by a society who hold public meetings. I am quite amazed that such a place should have been permitted to exist. Sixty-four loads of bodies and earth, mixed together, were removed. Such was the intolerable stench that num-bers left the place, and very commonly, during the services held here, four and five women have been carried out in a fainting condition.

3521. In your opinion did that arise from the stench of those bodies?—I think so, decidedly. Many have suffered seriously in their health. One man, whom I have recently examined, attributes a malignant typhus, which held him to his bed during seven months, to the exhalations from the bodies beneath, and I believe he was correct in that opinion.

3522. Chairman.] This evidence you have given of a particular spot, is strongly confirmatory of your general opinion of the necessity of burial-grounds being removed from large towns?—Certainly.

The following notice of Mr. Anderton's motion in the Court of Common Council has appeared in the Provincial Medical and Surgical Journal, of Aug. 7th, 1841,-

"The Subject of intramural sepulture has at length been taken up by the Common Council of the City of London, and we trust sincerely that the question will not be abandoned until some measures be devised for allowing the dead 'to rest in peace.' The evil effects produced by the interment of large numbers of bodies in contracted spaces have been abundantly proved by Mr. Walker, in his popular work, entitled 'Gatherings from Grave Yards;' but independently of the physical evils attendant on the practice, common decency, and the respect due to the departed, require that some place of interment should be provided, where the dead may remain undisturbed. Within the precincts of London no such place can exist."